The Safegard of Saylers, or great Rutter,

Containing the Courses, Distances, Soundings, Flouds and Ebbes, with the markes for the entring of sundry Harboroughs both of England, France, Spaine, Ireland, Flaunders, and the Sounde of Denmarke, with other necessarie Rules of common Nauigation.

Translated out of Dutch into English, by *Robert Norman* Hydrographer.

And newly corrected and augmented by E W. 1605.

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To the right Honorable his singular good Lord, Charles Howard, Erle of Nottingham, Baron of Effingham, Lord high Admirall of England, Ireland, and the Principalitie of Wales: Knight of the most noble order of the Garter, and one of his Maiesties priuie Counsaile, &c. *R. Norman* wisheth increase of honour, in perfect felicitye.

THe learned (right Honorable and my verye good Lord) haue alwaies in their account and register of morall vertues, assigned a certaine prerogatiue of excellency in one more then in an other; not for that they deemed the troupe of vertues (being in thē-selues simply considered) to surmount one another in singularity, al being perfectly good, and mutually combined together, but in respect of some generall benefit and publique commoditie, accrewing & issuing from some one, more then from an other. And in this respect haue they dignified and priuiledged Iustice with this honourable tytle, tearming her: The soueraigne Queene and chiefe Ladye and Mistresse of all vertues, because she not only is a vertue, in each degree perfect with the rest, but also for that (besides her other offices, partes and effects) she is distributiue, yeilding vnto euery one, that which in right is due there-vnto: wherein she sheweth her selfe publiquelye beneficiall to all Countryes, States and cōmonweales, where she is had in price, reuerence, regard & honour,

and where ſhe is foſtred, vpholden, maintained & cheriſhed.

Which aſſertion being granted (as it cānot but be true) me thinks there is great reaſon offered & miniſtred to prefer Hydographie or Nauigation before any other arte or ſcience, not ſo much for that it iumpeth in equalitie, and matcheth in ſingularitie any other whatſoeuer, in ſundrie ſubtill deuiſes and ingenious inuentions, with the vſe of manye notable inſtruments, as Compaſſes, Aſtrolabes, Plats, Quadrants & many other appendances incident to the ſame, as cheefly for the greate and pulike commoditie in generall, redounding (by the vſe & practiſe thereof) to the whole bodie of the common wealth, and each particular member in the ſame.

The firſt inuention whereof, furthered with the artificiall aide of many a hiddē, ſtrange, & almoſt ſupernatural deuice ſince added to the ſame by the ſtudious trauailer & induſtrious Mechanician: he ỹ wold throughly cōſider, ſhold finde matter rather miraculous to wōder at, thē to be thought compaſſable with the reach of humaine braine or penetrable to the capacitie of a fraile ſilly worldling: yea he may heerin as it were in a mirrour, beholde and ſee the ineſtimable bounty and infinite goodnes of the Lord, who of an eſpecial loue & purpoſed good wil, which in his ſecret wiſdōe he had determined for the maintenance & reliefe of humain ſociety, hath from aboue infuſed this ſo excellent a skil & knowledge in to the mindes of men, onely thereby to haue his wonderfull workes euerie where knowne, his praiſes reſounded, and his holy name from one generation to an other glorified.

By this art we inioy by participation ſuch commodities as grow in other Regions & haue the ſame plentifully brought home to our doors by exchāge & entercourſe of ſuch wares as we (euen in ſuperfluous meaſure) poſſeſſe within our own countrie: by it we ſee & learne the ſituation, natures, cuſtōs & dealings of other countries, by mutall traffique, bartering with them, & enterchāgeably giuing & taking by exchāge one commodity for an other, wherby the needie that one ma-

hath

hath of an other, more cleerely appeereth: and thereby is to bee the more willingly embraced & brotherly frequented. By it many a poore commoner labouring about these commodities is relieued, and many household from pine preserued: by it the Mariner is maintained, whose seruice in al marine exploits stadeth the Prince in special steed. To be short, by it is the Nauy royal furnished, the Realme fortified, & the common wealth inriched. Is it possible therefore that there can be any so vnnaturall to his countrie, or so iniurious to himselfe, that without blushing face can say, he is not maintained or at least not greatlye furthered (if not wholye and intirely, yet in great parte and quantitie) by Nauigation? Truely I thinke none. And if any should bee so fond or vndiscreet, his absurde opinon would soone be discouered, and the inconueniences or rather mischeeses wherein we should bee so soone enwrapped, would quickly fal vpon vs, if God in his wrath and iustice for our vnthankfulnes should stay the vse thereof, wherunto we are moste humbly fall to beseech him in mercie to graunt continuance.

These so many, so necessarie, and so profiteble vses of Nauigation, aduauncing the honor of our countrie, and increasing the wealth of the same, haue enforced mee in discharge of some part of my duety to my natiue soile & Region, & the rather because of my profession, to further the same with this small worke translated out of Duth, containing the gatherings of diuers experimented men, necessarie to be knowne and obserued in our common Nauigation: as Tides, Depthes, Soundings, Markes & Sandes, with the rising of sundrie lands which by no Chart or Plat is expressed or knowne, but resteth onely vpon the relation of the experimented Trauailer.

All which being finished & according to my slender skill ended, I am the bolder (being thereunto by duety boūd, to present vnto your honour as a pledge or token of my thankefull heart for the manifolde benefits and noble encouragementes which to my great comfort I haue continually found in your Lordship towards me, beseeching your honor to accept & pro-

ceit the same, as the poore labours of him, who in all points of loyall duty acknowledgeth himselfe your Honours moste bounden suppliant and seruant. For although the worke bee intituled, *A Safe-gard for Saylers*, yet so small is the force of a litle paper in this our dainty age, that it is not able to defend or shift for it selfe, much lesse to be a *safe-gard* to others, except your honor according to your accustomed goodnes and wonted generositie, perfit & still remaine as a But-warke both vnto it, and the *Marine Coates*, who continually pray for your Lordships daylie increase of Honor in this life, and after your mortall race heere (heroically runne) a place among the elect of God in the heauenly Hierarchie.

Your Honours moste humble seruant
Robert Norman.

To the friendly Readers, Sailers, and Mariners.

Eing by the politique and diuine lawe of God all men be generally bound any way they are able, to be profitable and helpful to their Brethren, countrie and common wealth, for whose sakes as much as for their owne, they are borne and created: how can we but iudge verie hardly of their meanings and inuentions, who publish and commit to the view of the worlde, their trauailes and labours to no other ende but to reape thereby eyther priuate gaine or popular applause and commendation, as though indeede they were not thereunto by duetie bound, with their whole studdy, care, endeuour, & all the faculties of their minde whatsoeuer. From which sort of Ambitious persons, as my owne conscience dooth cleerely exempt mee: so yet neuertheless, I feare that shall hardlye escape the hard censures and criticall doome of many Linxes, whose glancing penetrancie and quicke eye sight, being able (as the fable reporteth) to look through a stone wall, will (no doubt) be readie enough to encounter my honest meaning in simplicitie, and bee a great deale forwarder to finde faultes then able to amend faultes. Howbeeue such seuere Stoicks shall daine to thinke of me, my owne conscience acquiteth me of al sinister pretence, & what peremptorie sentence soeuer shall bee pronounced vppon me, I doubt not but the better moitie of the marine sorte (for whose vse this present worke is especially published) will accept in worth these my paines and trauailes.

Neyther neede I to feare, (as I hope) any sinister construction at the handes of those, which with indifferencie, will weigh my meaning, and without preiudicate opinions, consider my labours.

To the Reader.

For as the worke is the obseruations and collections of diuers and sundrie experimented Trauailers: So if they any where be found somewhat in matters of smal moment, to iarre or a little to disagree, consider that the iudgements of sundrye men be & euer haue been diuers & sundrie. Besides, there may some pettie faultes escape in the Dutch Copie by ouersight in printing. But truely as neere as I could, I haue followed, yea & in manye places by my owne obseruation bettered the same. All which trauaile for thy behoofe, furtherance, and fauour in thy worthie and moste excellent trade, I was the willinger to enterprise, and (as thou seest) accomplish, because of the great commendation, praise & approbation giuen thereunto by diuers skilfull men, expert in those Coastes whereunto this ser-ueth. All which I haue done (Gentle Reader) with intent profit my Countriemen, withwhome I wish increase of skill in all profitable artes and Sciences.

Robt Norman.

and dangers, from London to

shall

shall haue on the spits at a laine water, two fatham and a halfe, and at neps tides three fathams, at a high water foure fatham, and in spring tides at a high water 5. fatham vppon the said spits, and so if ye be bound into Coome water, goe your waies vp northward, and so take your heede of a Rocke that lieth on the north side of the Channell, and come no neere it then 4. Fathom, and also the Rocke that lyeth on the west side of that channell, come no neere them 3. fathom, and so your lying that Rocke of that channell, a right ouer the Sandeth in sheds of Sparsholt and Hing is in the middle of the greene fields then shape your course and so vnder yee by that vp as far on the West end, your way north north-west & by north, till ye come as high as Sparsholt-house and there you may anker, and there it floweth on your change day, south and by west, and at the ende of a fleud from the spits to the northward, take heede to the Sandes that lyeth on the east side of you, & come no neere him then 6. or 5. Fath. and so run your North till you haue brought the ende of Sandes til the high land on this West, and so go northeast till you come at the Quaye, and come no neere it then 3. Fatham and a halfe at laine water, and so you shall haue 4. Fathom at a high water, also if ye be bound from the Naze into Harwich water, your course lyeth north west & by north west and by west, and so take heede of the Pies that lyeth on the west side of that course, and come no neere them then three Fatham, and so take heede of the Pole head that lyeth on the east side entring into Harwich water, and come no neere it then 4. Fatham. Also take heede of the Sholter that lyeth on the west side of that channell, & come no neere it then 3. fath. and so run vp along by the Beech that lyeth on the east side of that channell. Also take heede of the Wares that lyeth on the west side of that Channell, and so you may runne by till you come before Harwich Townes, and there you may anker, and there it floweth on your change day, south and by east and north and by west.

Also

Also if yee bee bound from the Naas with Dafard Naas, your course lyeth betweene the northeast and southwest, and take heede of the Platters, and of the long land, that lyeth on the south side of that course, and so you may goe hard aboord of the Naas, and so runne yee no farther off than nine or eight fatham. Also your course lyeth betweene Dafard and Lestoffe roade, north and by east, & south and by west, and so take heede of the Downe head, as you enter into Lestoffe south roade, also your course lyeth betweene Lestoffe North rode and Yarmouth rode, north and south. Also if you bee bound south of Yarmouth rode to the Northward, take heed of the Frenchmans sande that lyeth betweene you and the main: & your marke of that sand are two high trees, brought in the midst of the long house, y standes upon the cliffes end. also your thwart marke of it, is a lowe tilde house in the valley, and bring the ones of it in the edge of that land, and so you may bouge within eight or nine fatham of it, and so you may goe with Winterton Naas, and come no nere the Naas then six or seaven fatham, & so take heede of the Shirte Brocke that lyeth thwart of Pemelbrots, and it lyeth on the eastside of the Channell, and come no nere it then 7. or 8 fatham. Also your course lyeth betweene Winterton Naas, and Cromer North and by west, and south and by east, also your course lyeth betweene Dafard Naas and Cromer also boord of all the sandes north northeast, and south southwest, and take heed of the Wrunchbarrel that lieth in the faire way of that course: also take heede of the Runner and Doe, that lyeth east southeast betweene Winterton Naas & Cromer, and lyeth alongst the land to the water: also your course lieth betweene the Daggar and Shield, and Burnam flats that lieth in the inner part of the mell, west south west, and East northeast: also your course lieth betweene the Daggar and the Shield and Laurenas, west north west, and east southeast: and so take heede of the inner parte of the well bankes which is the vttermoste parte of Burnam flats.

And

And many other blinde lands and dangers, alwayes yee bee bound from Lutton as into Dunbar, take heede of the Bull, that lyeth on the west south west side of that channel from no neere it then 7. or 8. fathams. Also take heede of the Bank that lyeth on the north north east side of that channel and come no neerer it then 7. or 8. fathams, and so ye may run into Grimsby rode, or to the Whitby if yee please: and if ye goe from the Staires both to Hull, cause to sound by the west shore, till yee come against Scarter mills, which is thwart of Paule, and give it a little berth, for there runneth a great tide in the mouth of that channel, and there is naughtie anker holde, and there is nothing in your change bay, west and by south, and to the west ward.

Also, if you goe from Lutton to Flamborow head, your course lyeth betweene them south south east and north north west, & so take heede of the Dunly land that lyeth thwart of betweene Burlington and Flamborow head, & your wittes hang well by that you cannot gae about the head, take heed how you anker in Flamborow rode, for there is foule ground and your anckers that you have to anker in cleere ground: to the Windmill that standeth on the lowest part of Flamborough head, and by ring the said Windmill in the mouth of the great bay, and so you shall anker in cleere ground, and your course lyeth betweene the Dagger and Brigg, and Flamborow head Northeast and Southeast, and if yee bee bound about Flamborow head, looke that ye give yee not into the Sea, for it is but ill baling of the coast againe, also your course lyeth betweene Flamborow head, and Scarborowe, Northwest and Southeast, and to take heede of Filey rogge that lyeth in the west, and give a faire birth of the shore. Also your course lyeth betweene Flamborowe head and Whitley Foote, Northwest and Southeast, and take heede of Whitbye Rocke, that lyeth in the fayre way of that course, and come no neere it then the windowes of the Abbey cleere of the lande: and also if yee bee put off with

Whitbye

Whitbie hauen take heede how you goe in, for there stãds vpon the rocks of the S. side of ỹ hauen a crosse, and so you may goe in and leaue the crosse on the south side of you, and giue it a little birth of you, but your ships breadth, & so you shall goe cleere into the hauen, & there it floweth on your change day southwest to the westward, also your course lyeth between Huntley foote, and Tinmouth hauen, West northwest and east southeast, & if ye go into the hauen take heed of your Beacons, which is 2. little white houses, and the one stands vppon the Cliffe, & the other standeth vpon the sands beneath, and also bring them together one aboue the other, and so shall yee go cleere into the Hauen, also if he be put beside it by night, there is in one of the a light: also if your winde be scant ỹ you must turne in, you may be bolde to borrow of the south west side at 2. fatham and a halfe at three quarters flood, & at the northeast side at three fatham, and so it floweth on your change day vpon the Bar Southwest and Northeast, also it floweth on your change day at Newcastle bridge, West southwest, and east northeast, also your course lyeth betwẽ Tinmouth and holy Iland, north northwest and south southeast, and so take hede of Cocket Iland ỹ lyeth in the midway of that course, and if ye be put to anker in Scate roade, take heede, for there is foule ground, also there are markes to tell you to anker in cleere ground, that is the draw bridge of Wãborow in the midst of the Castle ditch, and so you shall haue good anker holde in cleere ground betwẽe holy Iland and it, if ye be bound into holy Iland hauen, be sure you take your marke with you, which is holy Iland church, that in the square tower of the Abbey, & so you shall haue vpon the Bar, at a low water, two fathams, & so you may be bold to borrow of Bibeile side, & if ye be put out of Scate roade with Warwicke, betweene the Plow & the Gaston, your course lyeth north northeast and south southwest, and if yee goe to Warwicke hauen, looke out for the crosse that standeth on

the

the northwest side vpon the rockes, and so ye may goe in on the south side of the Crosse, till you come as high as Tweedmouth. Also your course lyeth betwéen ỳ Ferne Iland and saint Tabs head in Scotland, north and by west and south and by east: also your course lyeth betwéene Scarborough and Saint Tabs head, north northeast and sou: southwest. and so ye shall goe cléere a seaboord of Ferne Iland, and whẽ yee be past it, you may hale in with Saint Tabs as your winde will serue you, and there it flowéth on your change day south and north: so fare you well.

¶ In Commendation of the painfull Sea men.

WHo so in surging Seas, his season will consume,
And meanes thereof to make his onely trade to liue:
That man must surely knowe the shifting Sunne & Moone,
For trying of his Tides, how they doe take and giue.

So must he duely seeke the Ecliptieke course of Sunne,
How he from West to East his proper course doth keepe:
His labour then (God knowes) as yet is but begunne,
For he must watch and ward, and shake off sluggish sleepe.

And haue a carefull eye, to hand that is at Helme,
For many one there is, that false his course will plye:
And swelling Seas likewise, the Ship may ouer-whelme,
Or set her on the shore, without the Pylots eye.

Whe

When *Boreas* is abroad, and bluſtring blaſts doe blowe,
In ſeaſon muſt he ſeeke to ſhort in lofty ſayle:
For that, if not in time he very well doth knowe,
That all too late indeede, no labour will preuayle.

But when the raging ſtormes doe ſwinge the ſhip on hye,
Ofte times (againſt his will) he ſpoones before the ſeas:
Elſe in goes all the ſayles, and takes her from her tryе,
In haſte to driue or hull, till God the ſame appeaſe.

Thus when he all the night, with wearie toyle hath tride,
And ſees the ſwelling ſeas hath ſet him from his way:
Then when a litle ſlacke of calme he hath eſpide,
With ioyfull heart to take the height he doth aſſay.

His *Aſtrolabie* then he ſetteth for the Sunne,
Or *Croſſe-ſtaffe* for the ſtarre called the *Ballaſtilee*
And thus with help of them and declination,
How land doth beare of him, he knowes within a while.

Then by his *Compaſſe* ſtraight he duly ſets his courſe,
And thus he brings the ſhip in ſafetie to her Porte:
Where of his hazards paſt he makes a great diſcourſe,
And each man (by deſert) doth giue him good reporte.

If Pylots painfull toyle be lifted then aloſte,
For vſing of his Arte according to his kinde:
What fame is due to them that firſt this Arte out ſought,
And firſt inſtructions gaue to them that were but blinde?

Finis. *R.N.*

Southampton Quinbo. row Portesmouth.	Redban. Aberden.	Granes mo.	Dondy & Andrews	The ge of the Moone	London Tinmouth, Orcell. poole.	Barwic.	Leith Lythe. Dumbar	Falmouth.
South.	S.by w.	S.S.W.	S.w.b.s	☽	S.West	s.w.b.w	w,S.W	w.by S.
H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.
12 48	1 33	2 18	3 03	1 16	3 48	4 33	5 18	3
36	2 21	3 6	51	17	36	21	6 6	51
24	3 9	3 54	30	18	24	9	6 54	39
12	3 57	4 42	27	19	12	57	7 42	27
0	4 45	5 30	15	20	0	45	8 30	15
48	5 33	6 18	3	21	48	33	9 18	3
36	6 21	7 6	51	22	36	21	10 6	51
24	7 9	7 54	39	23	24	9	10 54	39
12	7 57	8 42	27	24	12	57	11 42	27
8	8 45	9 30	15	25	0	45	12 30	15
48	9 33	10 18	3	26	48	33	1 18	3
36	10 21	11 6	51	27	36	21	2 6	51
0 24	11 9	11 54	39	28	24	9	2 54	39
1 12	11 57	12 42	27	29	12	57	3 42	27
2 0	12 45	1 30	15	30	0	45	4 30	15
North.	N.by E	N.N.E	N.e.b.n		N.	E.n.e.b.	E E N E	n.w.b.w

Foy Lin Dunbar. Teimot. Dertmo. Dlimot	Bristol	Milton Bridge. Mater.	Portis Petre Port	The age of the Moone	Dolney Poole. Dwell	Deepe. Lin Lowys	Balsing. Douse. Harwich Farmot.	Calice.
East.	E.by S.	E.	S.	S.e.b.E	☽	S.East.	S.s.b.S	S,S, E,	S.by E
H, M.	H, M.	H, M.	H. M.	H, M.	H, M.	H, M.	H, M.	H, M.	H. M.
48 7	33 8	18 9	3 1	16	9 48	10 33	11 18	12 3
36 8	21 9	6 9	51 2	17	10 36	11 21	12 6	12 51
24 9	9 9	54 10	39 3	18	11 24	12 9	12 54	1 39
12 9	51 10	42 11	27 4	19	12 12	12 57	1 42	2 27
0 10	45 11	30 12	15 5	20	1 0	1 45	2 30	3 15
48 11	33 12	18 1	3 6	21	1 48	2 33	3 18	4 3
36 12	21 1	6 1	51 7	22	2 36	3 21	4 6	4 51
24 1	9 1	54 2	39 8	23	3 24	4 9	4 54	5 39
12 1	57 2	42 3	27 9	24	4 12	4 57	5 42	6 27
0 2	45 3	30 4	15 10	25	5 0	5 45	6 30	7 15
48 3	33 4	18 5	3 11	26	5 48	6 33	7 18	8 3
36 4	21 5	6 5	51 12	27	6 36	7 21	8 6	8 51
24 5	9 5	54 6	39 13	28	7 24	8 9	8 54	9 39
12 5	57 6	42 7	27 14	29	8 12	8 57	9 42	10 27
0 6	47 7	30 8	15 15	30	9 0	9 45	10 30	11 15

How to sayle from Amsterdam going out to Sea.

FIrste, When you shall Sayle from Amsterdam to Thyoorte, keep you in the middle channel. And when you are without Thyoorte, then goe Northeast so long, till you haue brought Parkerkerke with the lowe Land of Edam. And then keepe so, till that you haue brought Amsterdam a good way open to the northwards of the Chappel of Thyoort, and then keep your course Northeast and by east, and East Northeast till you haue brought Edam by East Werken, & then you are past Pampus. Then goe northeast towards Urke, and when you see Urke beare northeast & by north from you, or more Northerlye, then are you in the right course. And hauing obserued these poinctes, you shal finde hard ground, and then againe soft ground, and a better depth, and then are you in the right Chanel. But if Urke beare northeast from you, the are you verie nigh to the north shore sand. Then goe nowe and then more westerlye, till you haue brought the Church and the houses in one, & then goe west northwest with the Hoft, & keepe the church & the houses in one, vntil you haue brought Wenslick a little without the land of the Ven, and keepe it so, till you haue brought the end of the Ven directly ouer Ankenson, keeping this course & the markes in one till you bring Groshoorke and it together, they haue two sharp steeples, and keep Wenslick open to the northwards of the Castle, as much as the breadth of the Castle or more. These are the markes of the Channel, you shall haue 4. fatham, and in the best 5. fath. 3. foote lesse, and hard streamy ground.

Item, to sayle from the Hoft to the Texle, you must goe northwest & by north. After as the winde and tyde will

ferne, the markes of the Creile, is Twiske church a little to the westward of the Cozne mill, which is on the west side of Hemelicke, and Hirnes a flat steeple which lieth at the south end of Cliffe. these brought together are the markes of Creile, and the Buies lie in foure fatham, and in the best deepe is fiue fatham, The Course from Creile to the plat is nozth and by east, the markes are Pendergas flat Steeple standing within the Land, and Buerthwisen a Village in the midway betweene Wozkwold and Pandergas (to wit) Buerthwisen, and then next Pandergas, and Hirnes is the third marke, then by east Stauerne you shall see a sharpe steeple. These are the markes of the plat, and booth lye in two fatham, and in the best deepe is but three fatham.

Item from the plat to the Tuffler, the course is Nozth Noztheast, the markes is a small sharpe steeple which standeth at the Corner of Pandergas, Hirnes, Polquerum, Hemelium, and the long Buerthwisen: goeing by these markes you shall come to the Buy, which lyeth in two fatham & at a lowe water, and betweene the plat and Tuffler booth the shoals of the Blacklye, a southeast and a Nozthwest mone booth make there a full sea.

Item from the Tuffler to goe to the westwardes of Wozcom, you must goe nozth and by west, or more Westerlye, vntill you haue two little Steeples noztheast of you, and shut one in another, they stand vppon the sea side, and when you haue brought them open one from another, then you shall see other two small steeples something to the Eastwards, then edge nozthwardes something eastwards, keeping them open one from an other, as farre as the other pall which stand by the sea side: Then haue you thwart marks for the Buy is a high house at the East ende of a Rowdom, and commeth in at the South end of Hinde, And these are the marks of the Buy or Tunne that lyeth west from Wozcom, and lyeth scarce in three fatham. And the best deapth is three fatham, and is soft ground.

Item, from by west Wozcom, to Peghelhacke, Nozthwards,

wards, the thwart markes is a long village by the Seaside, comming into a valley, and in the same vallie comes a small steeple, and against these markes the Buy or Mun of Peghelhocke lyeth at three fatham & a halfe, the best deapth is foure fatham soft ground. The West shore is very deep, the Eastland shore is flat or plattie.

Item, from Peghelhocke to the middle gront, the course is north, the land marks are two sharpe steeples, northeast from you: those twaine brought together, there lyeth the middle ground, on which is foure fatham, the best deapth is fire fatham, and the west parte is verie deepe, and then go north northwest with Swanballick.

Item the thwart markes, for the Buy of Swanballicke are Bolswert, brought open a little by south Colmare by a little round house. These are the markes for the Buy which lyeth toward the East shore in three fatham, you may saile by them as ye come from within outwards, but as ye come outwards you may not saple by the west shore.

Item, then from Swanballicke to Skutland, the course is northwest, untill you haue brought Panderga to the northward Polschwilen, which is a round village with a little flat Steeple, and is to the Southward of Macom the next to it, and keepe Panderga in the middest between the South end of Macom, and that round village, then can you not go amisse. And when you haue brought Panderga neer to Macom, then are you nigh the north land, and if Panderga bee neere the round village, then are you nigh to the Southland, therefore keepe Panderga alwaies in the middle betweene that village and Macom, as long as you can see them, till you come about Kalhock.

Item, the marke of Skutland, is a flat Steeple which sheweth ouer the blockehouse of Harling, the Land markes is Bolswert Northwards of the Stintsen, which standeth on the Northwardes of Womens, that Buy lyeth in fire Fatham of the North shore, and is verie deepe, & in a maner shore deepe, & the best deapth there is seaven or eight

fatham. You may ſayle by the ſouth ſhore by your leade.

Item, the courſe from Skutſand to Caiſhocke is weſt northweſt. The markes of Caiſhocke are theſe, Fromiker with Harling, or verie nigh vnto the houſes of the Towne of Harling, and vppon the north land lyeth the Buy at fiue fathams.

Item, the courſe from Caiſhocke to Woolfehook is north northweſt, and you may bee bolde to ſayle by the eaſt ſhore, from Caiſhocke to Woolfehooke and the channel, is ten or twelue fatham deepe, and the weſt ſhore is there verie ſteep to the Caſtle.

Item, from Woolfehook to Schierinchalles the courſe is North and by Weſt, and the beſt depth is ſeauen or eight fathams, and then from Schierinchalles to Langerſande, the courſe is northweſt, there you may not ſayle too neere the ſhore, as you come from within outwardes: theſe two Buies (to wit) Woolefhook & Langerſand, are no markes to make account of, but Woolfehooke lyeth alſo on the eaſt ſide, at 4. fathams, and Langerſand likewiſe lieth in the ſame ſide at fiue Fathams, and comming from without inwards, you may ſayle along on the eaſt ſide of Langerſand by Schierinchalles: vpon the weſt ſide comming inwards, keepe you at ſeauen fathams, and you cannot doe amiſſe.

Item, from Langerſand to the Caſtle, the courſe is north, the eaſt ſide is ſhallowe and flat.

Item, the courſe from the Creile to the South Buye of Wyringen flats, is weſt northweſt. And when you haue brought Twiſke in the middeſt between the two Steeples which is Derdoes, and Almerdorpe, then take heede you come no nearer to that flat with any ſhip, that drawes much water, eſpecially at a lowe water, and then ſet of northweſt and by weſt. Neere a ſouth eaſt and northweſt Moone makes a ful ſea. And when the Moone is eaſt or weſt, then is it there ſtill water, and beſt time to ſayle ouer it.

Item, the markes of the ſouther Buye from the flat of Wiringen, is Twiſke beyond Almerdorp, and the thwart

markes

markes is Cleuerst when it commeth by south the west end of the Church of Wyringen.

Item, from the south Buy, to the next Buy or Tunne by Scorne, the course is northwest and by north, and this Buye lies of the west shore of three fatham, a quarter lesse. Then must you keepe by the east shore, that is the deeper side, the Marke is the Mill on the south end of the Riuer.

Item, from Scorne to the North buye, the course is North northwest, The east shore is flat, and the best of the Channell is three Fathams at lowe water, the West shore is the deepest, the thwart markes for the North Buye, are two Towers standing to the East wards by Wyringen brought in one, and the Buye lyes in three Fathams of the wester shore.

Item from the North Buye to the Nese, keepe the North Buye with Memelick, so farre as you can see, till you bring those two Steeples or Towers into one, and then shall you haue water enough. And then runne on north and by west, and keepe off from the Wester shore, for that is flat, & the easter shore is deeper. And in the right channel is seauen fatham deepe about the Buye. And markes of the Nese that is westward is a steeple by Wyringen, brought a little way by West the vttermoste houses of Wyrengen, and lyes towards the East shore in 6. fatham: You must then go more Westerlye with the west shore in fiue fatham, and keepe so till the Watermill come without the north end of the riuer, keeping so til you finde ten or twelue Fatham, then go west northwest to Vogelsand, and then you haue both the shores verie deepe. And when you come neere to Vggelsand, you shall see Coger church to the westward of the houses which stand by the west of the mill, then keepe Coger Church to the westwardes of the houses ẏ stand westward of the mil, so long till the high steeple come without the end of the houses, which stand to the northeast of that high Steeple, keeping them so a little without the houses, and so can you not misse on the south shore, keepe in fiue Fatham till you

come to the Roode, which is the Herne about Vleringerdicke.

How to sayle to Amsterdam comming out of the Sea.

ITem from the Bulle inwards to Hobsand, the course is south a little to the Eastwardes.

Item the thwart markes from the Bulle is the Cape vpon the corner of Schellinck, & the south end of the downes of Schellinck, and lyes in fiue Fatham on the easter shore, and in the deepest is nine or ten Fatham, and on the West side is deepe till you be past Hobsand, and beeing past Hobsand, the fore floud sets you thwart ouer to the Buye. And you may goe that way, when you come from without inwards. Therefore you must keep your selfe in deepe water. And the fore Ebbe doth runne againe directly towards the Fleland.

Item, the Markes of Hobsand is the easterliest sharpe Steeple vpon Schellinck, brought a little to the eastwards of the long house and the sand bankes of Fleland. Those brought a little within the white Leden, and thereupon the Buy, and lies in fiue Fatham by the east shore.

Item from Hobsand to Langersande, the course is south and somewhat westerly, come not neerer to the east shore then seauen Fatham, and so you may not sayle fast by Langersand, for the Buy lyeth in fiue fatham of the East shore, and lyeth at the ende of Langersand, where you vse to turn into Getting for to sayle to Harling. Then from Langersand to Schierinchalles, the course is southeast, come not in any lesse water then seauen fatham, and you may not come nere Schierinchalls: on the west shore thwart ouer against Schierinchalls you shall haue 10. or 11. fatham.

Item, from Schierinchalls to Woolfhooke, the course is South southeast, set your course alongst the west shore, and keep in fiue or seauen fatham. About Wolfehook it is eight Fatham, and the eastermoste Buy lyeth in foure fatham, ye may sayle hard by it when ye come out of the sea inwardes, there-

therefore keepe yee in deepe water.

Item, from Woolchook to Raithook, the course is south-east and by south. Then you may keepe by the East shore in foure or five Fatham, till you come to Raithooke. In the maine Chaninell, is eleuen or twelue fatham, the west side is a shore almost steep too. The after flood sets into the old Wye, the markes of Raithooke is Franker, brought open to the Eastwardes of the towne of Yarling, a little by the west Nil, which is to the westwards of the Steeple of Yarling. There doth the Buy lye in five Fatham.

Item, from Raithooke to Scutland the course is east southeast, vntill you haue brought the Beacon southeast of Raithooke, and thwart of you, and then within a while you shall haue holder water: the south shore is flat but you may well sayle by it, the best deapth shall be five fatham or there abouts, and then you shal see Marcum beare southeast from you, which standes by the water side with a mil, and to the southward of Marcum doth lye a little round village with a flat steeple, and betweene this Village and the south ende of Marcum standes a flat Tower, and is called Panderga, keepe this Tower in the middle betweene the middle of this Village, and the south ende of Marcum, and so you cannot take any hurt on neither shore. And if Panderga bee nearer to Marcum, then are you by the north shore, and if Panderga bee nest the Village, then are you by the Southland, therefore keepe Panderga in the middle, vntill you haue brought Winaldom ouer the highest of the Towne of Yarling, and then you shall haue deepe water. Then haue you the Beacō of Doueballigh vpon the thwart marks of Scutland, which is Winaldom with the blockehouse of Yarling and Bulswert by North, the two Stenghen lyes by north Wocustaem, and the Buye lyeth by the North shore in sixe Fatham and it is steepe too.

Item from Scutland to Swanbalch, the course is north-west and southeast: There you may not sayle neere the east shore, and yet with an after flood and a fresh gale of Winde

at a full water, you may come nere to the Caster shore. The flood runneth southward when the moone is S. or N. & the ebbe againe runneth northwards so long as the Moone is E. or W. yet notwithstanding, a southeast or northwest M. makes a high water. And heere the streames sets to ỳ westwards & like wise vpon the flats. And about Swanebalch, you may keepe by the west shore, but take heede that you come not in lesse depth then fine fatham.

Item, the thwart markes from the Buye to Swanebalch, is Wolfwart brought ouer a little round house, which stands to the southward of Curmor, and against that booth lye the buye on the east side, and lies in three fatham water.

Item from Swanebalch to the middle ground, ỳ course is south southeast and north northwest, keepe the Buye of the middle ground lying about Hinde to go by, and so go ye well. And betweene the two Buyes you may bee boldest towards the west shore, and yet you may saile hard by the East shore: when you come from without inwards, you shal finde the buy of the middle ground to lye in foure fathams, or there abouts of the east shore.

Item the markes of the middle ground, are two sharpe steeples & they lie northeast frō you, the one is called Arom and the other Peningen, these are the thwart markes, and you shall see likewise two flat Steeples, by east Harling, which are called Winaldom and Middelum, those twaine are the land markes, & these two Churches must be brought both in one.

Item from the middle ground to Peghelhooke the course is south, the East shore is flat, and the west shore is steepe too, the thwart markes of Pegelhooke, is a village vpon the water side to be brought in a gut or vallie, and directly vpon this Out or vallie, comes in sight a small Steeple: these are the markes of the Buye. And Peghelhooke lyeth on the east side at three fatham and a halfe.

Item, from Peghelhooke to the west of Wlorkum, the course is south, the east shore is flat, and the West shore,

not

not ſo flat, in the Channell is ſoft ground, the thwart marks to the weſtwardes of Woꝛkum, you ſhall ſee a ſharpe ſteeple lying farre within the land, to the noꝛthwardes of Hindelopen, and when they come with the houſes ſtanding by Noꝛth Hindelopen, and thwart of Hindelopen there lyeth the Buye in two fatham ½ at a lowe water in the beſt deapth is thꝛee fatham, hard ground. Then weſt of Woꝛkum to the Tuffler, the courſe is ſouth and by Eaſt, Eaſterlye: ſo long till the markes of Tuffler, that is Panderga a flat ſteeple to the ſouthwards of Woꝛwold within the land, and you ſhall ſee a little ſteeple come ouer Coꝛe, of Panderga. Theſe are the land markes of that Buye, the thwart markes are Hemellum, the countrie houſes of Holquellum and Pyrus flat ſteeple, keeping alongſt theſe, you ſhal come to the Tuffler, which lies in two fatham ½.

Item, from the Tuffler to the plat, your courſe is ſouth ſouthweſt, accoꝛding as the winde oꝛ ſtreame booth ſerue, betweene both theſe Buyes lyes the holdes of the Wlacke, and you muſt keepe Panderga in one with the Countrie houſes and by ſouth, ſo long till you haue bꝛought Pirus which is a flat ſteeple to the Eaſtwards of Stauerre ſtate, and theſe are the thwart markes of the Plat, & lyeth at two fatham ½. The land markes are the countrie houſes ſtanding ſcant halfe way betwixt Woꝛwold and Panderga (to wit) the countrie houſes nert to Panderga, & theſe markes being in one, there you ſhall finde the Buye which lyeth in thꝛee fatham.

Item from the Plat to Creile, the courſe is ſouth and by Weſt, and going ſo, you ſhall now and then haue deepe water, and ſo go til you haue bꝛought Tuyer by weſt the coꝛne Mill, which ſtandes by weſt Hemslicke. Theſe are the lãd markes, and the thwart markes is Pyrus, a litttle flat ſteeple, which commeth in at the ſouth end of the Cliffe: theſe marks being in one, there lyeth the Buye of the Creile in 4. fatham, the beſt deapth is fiue fatham.

Item, from the Creile to the Hooſt, the courſe is ſouth-

eaſt,

east, goe so vntil there appeare a sharp Steeple at the South ende of the Cliffe, and bring Grootbrooke and that in one. These are thwart markes of the two Buyes, and then Pemelick steeple brought by North the Castle, as far as the Castle is broad or more, that is likewise a thwart marke: the land markes is one end of the Men, with the east church of Ankeusen. The Creeple lyeth in three fatham large. And Hooft lyeth in foure Fatham toward the east shore, and the Creeple lieth on the wester shore, the best depth is scarce 5. fatham and hard ground.

Item, from the Hooft to Urk, the course is east southeast til you haue brought Medenblincke a little without ꝑ land of the Men, goeing so till you bring the Church of Urke within the houses, & keep it so til you come neere vnto Urk, and now & then edge to the southward, til the church of Urk beare almost north northeast from you, and then goe southeast with Pampus. And when you are come so nigh vnto Pampus, that you can see Amsterdam with the Chappell of Tyost, keeping your course so vntill Merkerkerke be brought in the plaine land of Vlidam, then keepe Merkerkerke so of you, till you come vnto Tie, and keep you in the mid channell till you come to Amsterdam.

Item, now for to saple from Huysowinen inwards, goe Northeast and by East, for the landes are steep to, on either side and cannot well be sounded: Therefore keep your course so vntill the Church at the east end come to the East of the highest and moste easterly lerne house, which stands to the westward of the Church: and dooing thus you can take no hurt by Burkland. Then go northeast so long til the highest spire steeple appeare without the houses which stand to the northeast of Howberich, and keepe those Steeples still by north those houses, so long till you haue brought the church in the Cooch, which is without a steeple, and couered with blew slates, nigh vnto the mill which standes betwéen Oosterend and the Duacll, and goe east southest, and keepe the Church and the Hill together as long as you can see them,

and

and then you shall see the water mill that standes on the o-ther side of Wieringhen, wil come between the Douer and the other corne mill: keepe this course towards the West shore in fiue fatham, and at seauen fatham ye shall haue the Buye which is the best deapth.

Item, the markes of the Buye vpon the Nes is the west-ward steeple: brought a little without the most westerly houses of Wieringhen, and dooth lie at fiue fatham on the East shore, and so you may direct your course. Therfore kéep by the west shore, from the Nes Buye, to the North Buye, which lieth on the flattes, the course is south and by east, and then when you haue brought two sharpe steeples ouer Wieringhen in one: then shall you haue 4. or 5. fath. there you must stay with Shippes of great draught to be lighted, The west shore is flat: the east shore is deepest, then going south and by east, within a while you shal haue sholder-water, that is to say 3. fatham ½ lesse at lowe water. And when you come so neere that you can see the Buy thwart Hemelicke, then you shal finde the norther buye of the Wlack: and the Buy lyeth in 2. fath. ½ at lowe water, and lyeth on the west shore, you must sayle by the east side: the thwart marks of this Buy are two easterly steples brought in one.

Item from the norther Buy to the other Buy thwart of Sochorne, the course is south southeast: the markes is the Mill on the South end, and lyeth in two Fatham ½ against the middle of the west shore, you must sayle by it east.

Item from Sochorne to the south Buy, the course is south southeast, and lyeth in two fatham ½ betweene these 2. Buies lieth the shallow of Wlack: the thwart markes of the south buy of the Wlacke, are 5. or 6. houses brought a little by south, the motte westerlye Steeple of Wieringhen, and these houses are called Cleuern, the land markes is a sharpe steeple by west Hemelick, which you must bring ouer Almerdorp, Almerdorp hath a little flat Steeple.

Item from the south Buye of the Wlacke to the Creille the course is east southeast, and to keepe the right Channel,

runne

ronne southeast and by east so long till you finde deepe water, or till you haue the land of Creile, that is Wyrus, at the south ende of Cliffe.

Item, when you come from by north inwards, and wil sayle to Ankewsen, then bring that high red house to the westward of the steeple, so that you may see between them, and keep so till the west end of it come right ouer that great high Farme house which standeth by north the Watermil, and these are the markes of the first Buye, then goe south southwest towards the wester shore in two Fatham, and then off againe into two Fatham ½ the thwart marks of the other Buye is Boecaspell, brought ouer that Farme house, the land markes are to bring the Mill by south of Ankewsen, a little by East of that high stone house which stands at the south end, and against that doth lye the Buye, then keep your course by the west shore. Upon a flowing water you may saile sast by the East shore comming inwards.

Item, the thwart markes of the third Buye is Grotebrooke, brought ouer the same farms house to the Northwards of the water Mill. The land markes of the same buy is a stone house which standes at the north end opening frō the Steeple, so as you may see betweene them: these are the land markes of the third Buye.

Item to knowe the land markes of the Buy to the southwards of Ankeusen: next to Ankeusen the watch house by the gate being brought by East the Steeple: And by these markes when the Mill comes in on with the quire of Boecaspell, there shall you finde the Buy on the East shore.

Item the land markes of the mosse southerlie buye, is the little tower of the hospitall, being a little by west of a little steeple that stands vpon the tower that the ankers do hang vpon: the thwart markes is a sharpe steeple brought on the south end of Wuerthwisen nigh vnto a high Farme house: with these markes lieth the southermosse Buye.

Item, now it is necessarie that al men should knowe that these creekes and streames before specified, are to be vnder-

stoode

floode for waters of pilotage, or lademanage: therefore by the Sea right it is plaine, that the Maister of any Ship sayling these streames, and refusing to take in a pilot or lodesman: that thereby the Ship doth perish, and miscarie: he is bound to make restitution to the Marchants for their goods.

These following are the Seauen Ilands of Potland.

Witholm, Ameren, Wil, Kem, Penow, Fanow, Numink.

Of Bombergen.

Item from Wombergen, to the Elue, the land lieth north-west, and southeast, and are distant 12. leagues. And a south and north Moone makes a full Sea in all those hauens. And likewise in Potland.

Item, Wombergen is a flat long Hill, and on the south ende of it standes a steeple, and to the north part of the same northeast end, doeth likewise stand a steepe Hil or Tower, and from that are high round Sand hilles, as though it were salt houses all alongst euen to the Polmes: and the course from Wombergen to the holmes, is North northeast, and they are distant a 11. leagues.

Item, the riffe lyes alongst betweene Wombergen and the holmes west or thereabouts in the seawards.

Item, in all hauens betweene Wombergen and the Elue and thereabouts, a south or north Moone makes a full Sea.

Of Friezeland side.

Item the Coast of Frizeland lies alongst, East northeast and west southwest.

Item, the Elder and the Holy land, lie east and by north, and west and by south one from an other, and are distant two small kennings.

Item, Ripen lyes from the holy land Northeast and by north, two great kennings asunder.

Item, the holy land and the Schelling, lye northeast and by east, and south west and by west one from an other, and are distant 31. leagues.

Item, you may sayle into the south Hauens, at 5. fatham.

Item,

Item, you shall come no neere the Holy Lande on the westerside, then nine or tenne fatham to the Northwards, for from the Steene at some places it is seauen Fatham deepe.

How to goe in with Holy land.

Item to sayle from the Holy land to the Elue, the course lies south and by east, and distant two kennings.

Item, he that will ride vnder the holye land, and comes from the west, let him not come any neare vp the west part then ten fathō, so long as you can see betweene the Monks and the high Cliffe, and then you may goe boldly with the south shore in foure fathams, by that lies or fiue.

Item, when the Cliffe beareth south west, or west south-west of you and the Colnerhooke lyes north northeast from you, there is the best Rode in foure or fiue Fatham water, faire white sand, and by Colnerhoek is likewise faire grouñd to anker on.

Item, when the Werk lyes south east and by south from you, then are the markes in one.

Item, when as Wensen lies south from you, then are you open of the Weser.

Item when the Cape of Roten lyes southeast and by East from you, then you shall ses them also in one.

Item, when the Tower or steeple of Borkum booth lye south from you, then are you open against the rather Emes.

Item, when you haue Juster tower northeast from you, then are you within the riuer of Juster.

Item

Item, whem the Beacons of Shermerinkocke lye to the eaſt ſoutheaſt of you, then you ſhall ſee them in one.

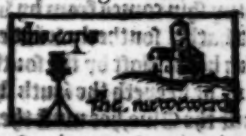
Item, from Roſe boꝛkin to that Beacon in the Peme: the courſe is ſoutheaſt and by eaſt, goe by the Southland in ſeuen oꝛ eight fatham.

Item, from the Beacon on the (Peme) to the Buy on the eaſt ſide of the courſe is eaſt and by noꝛth.

Item from the Buy on the eaſt ſide, the courſe is Eaſt & by noꝛth. And holds the Noꝛth ſhoꝛe till you come to the Stoꝛ Doꝛe.

Item when as you come from betwell, and will ſayle into the Elue, then keepe the ſouth ſhoꝛe in fourteene fatham, and in Elue, you ſhall haue fifteene fatham, and is hard ground.

The courſe to goe into the Elue.



Item when you goe with the Elue, you muſt bring the Cape and the new Werke in one, which will bring you with the Buy, and the ſhoꝛe Buy lies on the South ſhoꝛe. Then from the ſhoꝛe Buy, to the Buy the Newgate, the courſe is Eaſt and by Noꝛth: reckon alway your ſtreames, foꝛ the flooues ſets commonlye Eaſt and by ſouth inwards. When running towards the Noꝛth ſhoꝛe in fiue oꝛ ſixe fatham, and ſo ſhall the Newgate come in with the firſt Buy oꝛ Dun, and when you haue the Werke ſouth at the firſt Buy, there ſhall you haue it foure fathō oꝛ thereabouts: keepe that Buy on the ſterebooꝛd and goe with the other Buy eaſt (in) and ſomething to the Noꝛthwardes from that other Buye, the Werke lyes ſouthweſt, and in fiue oꝛ ſixe Fatham water then foꝛwards to the third Buye oꝛ Dunne: goe Eaſt ſoutheaſt, ſomewhat ſoutherlye (in) And the Werke lyes from the third Buye South-

weſt

weſt and by ſouth, there is deeper water ſeuen or eight Fatham faſt by the Buy, then beare on to the fourth Buy eaſt Southeaſt, and the Werke lies of it ſouth weſt and by weſt, And that fourth Buy lyes on the higheſt of the new groũds and the new grounds are ſteepe to, and lye dry at low water. Then when you come out of the Seas, you may goe in fiue or ſixe fatham water by the foreſaid ſecond Buy, hence away to the Roſe beacon without any danger, and keepe by the ſouthland. Then keepe your courſe from the fourth tunne to the firſt, ſoutheaſt, and the firſt tunne or Buy lies at the end of the new grounds: and when you haue brought the mill within the Lande, and Crwis Dicke in one, then are you paſt the new groundes. The Werke and the firſt Buy or Tunne, lye the one from the other weſt ſouthweſt ſomething more ſoutherly.

Item, when any ſhip comes from by weſt and will goe into the Elue, and hath a ſoutherly winde, or a weſt ſouthweſt winde: let him beare aloft by the ſouth ſhore in twelue Fatham, ſo long as he keepeth the ſouth ſhore, for when hee comes right againſt the Elue, hee muſt then keepe the ſouth ſhore in ſeauen or eight Fatham, going ſo alongſt the ſouth ſhore till you haue brought the Werke ſouth from you, or nie therabouts: and then goe more northerly til you come to the Buy of the new gate or entrie in. And from the firſt Buy, goe ſouthweſt and by ſouth til you come to the firſt Buy, and when you ſhal ſee a mill in a certaine blacke heath with a houſe: then hale in towards the land, and when you haue brought the mill to the eaſtwardes of that houſe, then are you within the Roſe Buy, then goe eaſt and by ſouth to the Roſe Beacon, and when you are againſt the Roſe Beacon, then ſhall you ſee a little Church with a ſmall ſharpe Steeple within the land: when you haue brought ỹ Church right ouer a long houſe a Cable length to the Eaſtwardes of Ketſebetell, then ſhall you bee hard by the Roſe Beacon. Then goe Southeaſt and by eaſt vp toward the Noen, and keepe the ſouth ſhore in ſeauen, eight, or nine fatham,

tham, so long, till there come to the westward of you a sharpe Steeple, brought in one with two other steeples, that stand in one Churchyard within the land, which is called Oldenbrook, and when one of the steeples is come so far by the east, then you shall see a couple of trees, when you have brought the steeples into these two trees, then are you past the sholdes of Romerder, and then goe east with Bunsutell and keepe rather alongst the north shore at five or sixe Fatham, but take heede of the souther shore for feare of Pelgheremsand, for you shall sayle alongst by it.

Item, if the weather so serue that you may, then keepe by the north shore still till you come at Willingbrich, and when you are come to Willingbrich, yet keepe you on the north shore still in seaven or eight Fatham, and hale so in till you come so farre as Rugerooyt, then you shall come to the Easter shore, then you must hale by something more Southerly to Holderland.

Item there is the South Clue which now lately in Anno 1571. is broken.

Item, from the first Bay, to the next Bay, your course is east and by South.

Item, from the second Baye to the third: the course lyeth east southeast, and something more to the southwards.

Item, from the third Bay to the fourth, the course is east and by south.

Item, from the fourth Bay or sunne to the sixt, the course is east and by north.

Item from the sixt Baye to the Baye in the Rose, the course is southeast.

Item from the Rose Baye to Rose Beacon the course is southeast, and something southerly.

The course to sayle to the Weser.

Item, hee that comes from the westwards and will saile to the Weser, having a Northwest or a North Northwest winde, let him not come any neerer to Wangeroge then six fatham, and then let him runne east so long till he see the vt-

ermoste Buye: and then there lies a sand on Larboard, which is called the mid plat, on which is but two fatham at a full sea, and lyes open before the Weser, then from that Buy to the other course is northeast.

Item if you should haue the winde southerlie, then goe with Wangeroge, and keepe you in nine or ten Fatham, and take heede of the wester Weser that lies at 9. fatham inwards, then take your course ouer from Wangeroge Northeast till ye come at ten or eleuen Fatham, then shall ye haue Wenser Church beare south and by east from you, there lies the vttermoste Buy.

Wenser Church.

Item. Wenser Church is a flat Church without anye steeple, and lies in Crowkens land: from the vttermost buy to the secõ Buy your course is east. And whē you are a little from the second Buy, then lies Wenser from you South and by east, and from that Buy to the third, your course is east. And when you are at the third Buy, then lies Wenser south from you: from the third Buye to the fourth, your course is east, but see that you alwaies attempte your tide, and then lies Wenser from you south and by West. Then from the fourth Buy to the Buy on the head, the course lies east and somewhat to the northwards. And when ye come to the Buy, then lies Wenser South southwest from you, then goe Southeast and by South to the Buy in the Faire way that lies in 10. or 11. Fatham, and take alwaies good heede of your streame. That Buy is laide for the Beacon, then southeast is the course to the Buy on the Coets.

Item from the Buy vpon the Coets to the Buy on the Steene of the Bollensill, the course lies southeast, and to the eastwards. And when you are about the Buye of Bollensil then set your course to the southward, with the west shore, there are two Beacons standing.

Item

Item, when you come high vnto the second Weacon there is a good roade for a westerly winde. And the hauns you Langh-

Langhwoorde.

woord Church in Cotirland, and if you will goe further, then set your course southeast to the Buye or Tunne vpon the Clacke. And when you are within that Buye: then go with the lest shore in three or foure fatham, and so you shal come now and then hard by ground land, vntil you come to Blexhemster. There be in the roade commonly such ships as are outlying ground, and doe tarie for a winde.

Item when Newarke lyes southeast and by south of you, then haue you both the Capes in one.

Blexhem Church.

Item, when you haue Henser Church south from you, then are you open before the Weser.

Item when the steeples of Borkum beare south from you then are you open thwart of the easter emes.

Item, when the steeples beare nue northeast of you, then you are within both y Easter Remens, in the wester emes.

Item, when the head lands of Rotum doe lie southeast and by east from you, then are they in one.

Item, when the headlands lye south southeast from you, then they are both in one.

The going into the Iade.

Item, if you will go into the Iade, when you are past the red sand, beare in southwards, euen as farre as you may,

and you shall leave Mewse Church on Steereboord side: and if you will sayle to the Wood, then leave the church on Larboord side.

Wangeroge

Item, you shall knowe Wangeroge by that there stands a little Church vppon it, and the steeple standes at the west end.

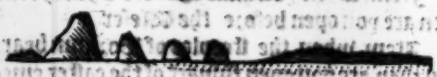
Item Spitzeroge is to bee knowne by that it is plaine Sandhilles, and then you shall knowe Langeroge, for that it appeares in two Sandhilles.

Item, you shall knowe Walkerom by that the west end is high Sandhilles, and the east end lowe Sandheaps.

Just

Item, you shall knowe Just two waies, there stands a Church ouer it, and the Steeple standes at the east end of the Church, and the mill that was in Just is blowne downe and is cleene gone, so that there standes nothing where the Mill was.

Burkum



Item, you shall knowe Burkum, by that it riseth in three parts, and about the middest of the land standes a church with a flat steeple, and standes at the east end of the church,

Item, you shall vnderstand, that the Easter Emes goeth in betwixt Just and Burkum.

Item, to know Burkum well, when you shall fall with it comming from by west, it seemeth to looke vpon as it were three Ilands: for betwixt euerie one of the hilles of it which seemes Ilands: is a Valley or flacke of plaine sand

without

without anye hilles, and on that which seemes the middlemoste Iland, stands a church with a great sharpe steeple, & stands at the west ende of the church.

Item from the northwest corner of Burckum, doth lye a riffe of sand, and lyeth well in the Sea, at least a league and a halfe, and you may sayle alongst by the same into the easter emes, and goe in east by south.

Item, the easter emes lyeth in east southeast, and when you have Burckum Steeple south of you, then keepe by the shore, in foure Fathams and a halfe, and edge ouer, and ketch sounding of Juller riffe, and you shall by and by have deepe water, and then keepe in by him.

Item when you have brought Juller steeple Northeast of you, then are you past both the Riffes of Juller, and then you are within the Easter emes.

Item, there is a newe Channell, that is when yee have broken in the wester Emes, which lyes a little to the westwards of the old Channel, & is as deepe at a low water, as the old deepe is at a full sea or high water.

Item, when any man will seeke to enter in at the wester-Emes, let him bring the huth south and by east of him, and the west end of Rotum southeast, and bring both the two great Capes in one, and then you shall finde the vttermoste Buy, and that lies in fine fatham, then goe from the vttermoste Buy to the second Buye, East and by north, and that lies at foure Fatham, then from the second Buy to the third Buy, likewise east and by north & that lies in fire fath. And then is the longest Cape & the last Cape vpon the old deep to bee kept both in one, and so you shall have ever the deeper water. Then from the third Buye to the farthest Buy, goe east southeast, & then edge something ouer towards Burckum riffe, towards the north shore, least yee fall to the eastwardes of Hakenballge, which goeth in by east Rotum. Also, when any man comming from by E with an easterly winde, would goe in at the old deepe, let him bring the longest Cape, and the least Cape as they stand in one, a-

gainſt the olde deepe, and runne ſo in, and there you ſhall finde the third Buy, and the old gate or entrie at a low water hath but two fathams ½ being an eaſterly ſwinde.

Item, Boſch is on the weſt end full of high Sandhilles, and there is no habitation vpon it.

Item ye ſhall knowe Schirmerkerog by the lowe Sandhilles and at the Weſt ende of it ſtands a high round ſandhill, and there ſtandes two Capes vpon it for to ſayle into Scholbalch, and you ſhall bring that Eaſt Southeaſt from you, and then you ſhall haue both Capes in one, and then runne right towards him till you finde the firſt Buye. And there lies two Buyes in one gate or entrie, and then when you come to the ſecond Buy, go eaſt northeaſt, and eaſt and by north, and you may ſaile by either of theſe Walles, and when you come at the third Buy, then go ſouth and by weſt or ſouth ſouthweſt, and you ſhall haue no leſſe at a low water then three Fatham. Now when you come out of the ſea and fall with Borne riffe, then edge towards the Wall at fiue Fatham, and at fiue fatham and a half. And do euen as heere before written, whē you will ſayle into Scholbalch.

Schirmonckeroghe

Item to knowe Schirmonkerogh: thoſe are lowe ſandhilles: and at the weſt end ſtands a hill which is ſomething higher: as for the Church, you cannot ſee it till you come hard by the Land: & Schirmonkerogh is two leagues and a halfe in length.

Ameland

Item, vpon Ameland there ſtandes a high great Church with a flat ſteeple towards the weſt end of the Iland: and is couered with blew ſlates, and there is a ſtone houſe ſtanding by eaſt of the Church: and it ſeemes to looke vpon, as though it were an olde ruinous farme houſe: and there lieth

three

thies high land hilles aboue the middeſt of the land, and Ameland is foure leagues in length.

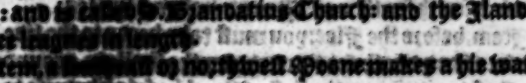
Item, betweene Schirmonkerogh and Ameland goeth in Scholbalch, and hath two gates or entries, one goeth in by Ameland, and the other by Schirmonkerogh.

Skelling.

Item, vpon the Skelling are fiue ſteeples, one ſtanding at the eaſt ende is sharpe, and about the middle of the land are three ſteeples: two flat ones, & the higheſt of all is sharp, and that which ſtandeth on the weſt end is a high flat ſteeple: and is called S. Jans dating Church: and the Iland is three leagues in length.

Item, a [illegible] or northweſt Moone makes a hie water in Maſtes deepe.

Item, Vlieſdwinen and the Pale are diſtant 24. leagues



Item, Petten be high ragged land hilles.

Item, Kettle downe is a white forked ſand hill.

Item, the Coaſt of Holland lies alongſt ſouth ſouthweſt and ſomewhat to the weſtwardes, & north, northeaſt ſomewhat to the northwards.

Item Marſedeepe and the Holden lie one from the other ſouthweſt and by ſouth ſomewhat weſterlye, and northeaſt and by north ſomewhat eaſterlye: and are diſtant three and fiftie leagues.

Item, an Eaſt or weſt Moone makes hie water in Marſedeepe.

Item the Pale and the Wielings are diſtant 3. leagues

Item, the Mase, and the Marsdeep, are distant foure and twentie leagues.

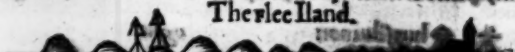
The Mase.

Item, the Mase lyes vp East Southeast, and somewhat Southerlye.

Item, the East Wozmhalt goeth in by Ilverhoose, and then by the Maineland: a West south southwest Moone makes a full sea also before the Mase mouth, and within the Mase, a south south west Moone makes a full sea.

Item, before the Flee: you must take heede to the tide, for the fore flood doeth set thwart ouer the shallow grounds to the East wardes, and the first of the ebbe sets likewise to the west wards.

The Flee Iland.



Item the Flee is knowne by the high white sand hilles, and there standes a small steeple in the Church.

Item, the Flee and the Texell are distant the one from the other 3. great kennings, and Wiland is foure leagues in length.

Item, there is an Iland that lieth betweene the Flee and the Texell, that is called Vereland, and there standes a little house vpon it. See that you take heede to your tides alwaies before the Texell, for the fore flood, and latter end of the Ebbe sets ouer to the Northwards, and the fall of the flood and first of the ebbe sets to the southwards.

Item, Texell is two leagues $\frac{1}{2}$ in length.

Item, from Marsdeepe to the Sweene is nine kennings

Item, from Marsdeepe to the Vlie, is 8. leagues.

Item, whosoeuer will saile out of Vlie to Shotland, the course is north Northwest, and somewhat westerlye, and so

sayle

saile with a soze winde, it is three daies and a halfe sayling, and is 152. leagues.

Item, for to knowe Holland, Egmont is a flat steeple, & standes vpon the sea side, and within Egmont are two steples standing together in one Churchyard.

Item, Fairehill and Shotland, lye by North Northwest and south southeast 150. leagues.

Item, Shotland and Wolfamnes lye North and to the east wards and south, and to the west wards, and are distant 46. leagues.

Item, Shotland and Orkeny, lie southwest and Northeast 20. leagues, and when you are about midway between them, you may see them both at once in a cleere day.

Item, Orkeny and Wolfamus, lye south southeast and north northwest 26. leagues.

Item, the southwest end of Shotland and Fayre-hill lye North Northeast and south southwest, two kennings distant.

Item, Fayrehill and Faire, lye Northwest and by west, and south east and by east, a great day and night sayling.

Item, Shotland and Wargben lye neere east, and west 60. leagues distant.

Item, Shotland and Faire lye west northwest, and East south east a day and a night sayling.

Item, Shotland and the Osterbooke of Island, lye North West and by West, and southeast and by east, three dayes sayling.

Item, Faire and the Osterbooke of Island, lye northwest and southeast two daies sayling.

Item, from the Osterbooke of Island to the Weare foot, the course is south south west, and North Northeast twentie leagues.

Item, from the Weare foot to the Siden, is 16. Leagues, the course is West southwest, and East Northeast is the

course

course to Pydall, from Sylden is all lowe plaine land, and within high.

Item, from Pidall to Wlebnie the course is West, and Wlebnie lies three mile from the land: and betweene Wlebnie and Pidall is 6. leagues.

Item, from Wlebnie to Robenes, the course is west, north west: and east southeast, sixteene leagues. Robenes is a little blacke point: betwen Wlebnie and Robenes is foure Hauens. And likewise there lies of Robenes west southwest three Ilands: whereof twaine are two leagues and a halfe a peece, and the third is five leagues long.

Item, from Robenes to the Snens Iockle, the course is northwest and by north, and south east and by south, and are distant sixteens leagues. And betweene them are many Hauens, as Dorse Hauen and Wustand, Cadswicke, Speswicke, Wlaistruse, Strent, Hamsort, Pullin, an Iland called Wlidowe halfe a mile from the land, an other also called Wlalsort.

Item, from Snens Iockle to the Weserstrant, the course is south and north, and are distant sixteene leagues. And by the Iockelles lye three Hauens called [illegible], then betweene the Riffe, and Bollen Riffe lyeth southwest Hauens, Kuimwort, and Grindsort, and an Iland called Sterren.

Item, from the Werderstant to the Schaghen, is 7. leag. & doelie North and by East, and south and by west, and betweene them lye foure Rivers, and called in that tongue Fooydes. The first is Waters fort, and then Welsort, Admersort, and in Admersort are three Hauens.

Item, from the Schaghen to Dilesort, is 8. long leagues and they lie one from an other North Northeast, and south southwest: and between them are two Fooydes, Dzenderfoord, and the Saghefoord.

Item, Dilesort, and Schalwicke lye Northeast and by North, and southwest and by south, and are distant foure leagues: in Dilesort lye three hauens, schielsort, and Alsort, and the Iland Edoe.

The

The fords in Iſland, that is the riuers or creekes going vp into the Land.

Firſt Swidens foꝛt, Heeſt foꝛt, Scoꝛt foꝛt, Weſe foꝛt, the Diſefoꝛt, Grunſwick, Nerd foꝛt, the Jockiefoꝛt, Rabben foꝛt, Heſſerbeche: and in that Hauen lie Whale fiſh bones.

Item, from Schaelwick to the Haddenſtrant, the courſe is noꝛth noꝛtheaſt, e ſouth ſouthweſt, and are diſtant 11 leagues. Heere lyeth three mountaines and yet is whale land.

Item from the Haddenſtrant to the Schagen Foꝛt, is 16 leagues and lie Noꝛth Noꝛtheaſt, and ſouth ſouthweſt: betweene theſe lye manie Foꝛdes oꝛ Creekes going vp into the land. And firſt the Swigrins Foꝛd going into the landwards, Oriens foꝛd, and then the Bitter, and the Putifoꝛd, the Nins foꝛd, e Wlydaell, and Waſedaell, the long Dæra.

Item, from Schargenfoꝛt to the Widalen, the courſe is Eaſt ſoutheaſt, and Weſt Southweſt, and are diſtant fiue leagues.

Staghenfort is a Hauen, and is called Lapland.

Item from the Widalen to the Rauen hooke is twentie Leagues, and lies eaſtnoꝛtheaſt, and weſt ſouthweſt, betweene theſe twaine lies three Hauens, the firſt Sigelfoꝛt, and then Wackfoꝛt, then Huiſwicke. And likewiſe three Foꝛdes oꝛ Riuers, the firſt Yolefoꝛt, and then Oneſelfoꝛt, and then Lerefoꝛt, all which are Riuers oꝛ Creekes going vp into the Land.

Item from the Romehooke to Grinſie, is eight leagues, and lies eaſt and weſt.

Item, Grinſie is an Iland, and lyeth from Huiſwicke, 8. leagues ſouth ſoutheaſt, and noꝛth noꝛthweſt.

Item,

Item Grinsle and Denstrt lye south southwest southerlye, northeast northerlye.

Item, Grinsle and Sighelwrt lye southwest southerlye, and northeast northerlye. And vnder Grinsle you may anker for a northeast winde in 17 fatham.

Item, from the Roembooke to the Langnesse, the course is East southeast, and west northwest, and are distant sirteene Leagues: betweene these twaine lies a sound and a River, the sound is called Rader sound, and the river is called Seselfoert and lyes at the westwards of the Langnesse: and Pnwicke and Roodhanen lyes eight leagues from Langnesse, and they lie in a manner east and west.

Item from Langnesse to Otterhooke, the course is south southeast, and North Northwest: and are distant foure and twentie leagues, and betweene them lieth a Hauen called Wornesorte, and to the Eastwards of the Langnesse there lies a great mountaine.

The going in at Vergate.

Item, if yee will goe in at Vergate, bring the steeple of Middelbrough & E. Cappley in one, or to the southeast southerly and run directly so till you finde Shald water at three Fatham, and goe yee so North ouer the Shald: then against Veiland, you shall come into nine or tenne Fatham, then keepe on so vntill ye come where the Mermaide is set vp at Zeruere, and till you haue brought those towers or steeples which

which are called Valentines towers in one: then shall you be ouer against the easter Towers, and keepe those towers of Tarnerre in one, and so runne euen hard to by them: and alwaies account of your tides: for a south or north Moon there makes a full Sea. Now to knowe Wackeren by the land, Weſt Capplen is a groſſe or a flat Steeple, and to the Eaſtwardes of Weſt Capplen standeth East Caplen, and that is a sharpe Steeple, and to the North and by East of East Capplen standes Domburgh, and is likewise a sharp Steeple.

The Order to be obſerued in comming out at the Wellings.

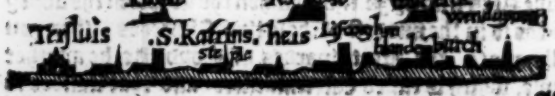
IF you come out of ỳ wellings, you muſt leaue one third part of the way on the Larboard ſide, ſo long as you haue the church by north the Steeple of the abbey of Middleborough, or to your ſight, vntill they be within halfe a flath one of another, then you ſhall haue Eaſtmunſter, as far frō the Steeple of the abbey as ỳ Coude Kerk ſtād by N. it, and when the Steeple of the abbey ſtandes ſo in the middeſt of thoſe two Churches, then you ſhall haue to the Northwardes of Coude Kerke another Steeple, which is called Weſtmunſter: and that ſtandes to

ſight

sight more then a ships length to the northwards of Coude Kerke, and when as the Steeple of the Abbey is brought in the middest betwixt both the two before named Churches: then you must runne directlye with them, keeping the steeple so until you haue brought Arderdingh a great ships length without Heilant, and then you must keepe Flanders side, for feare of the Poales of the Willing, that you may be sure of the other markes. Then you shall see Meindwine with a plaine, and the valley by it that seemes to bee two ships length, and then you shal see the small steeples which are called Meindwine open against the middle of the valley, and then the corner of the Steeple is the marke of the deapth of the water, for the nearer to the Poles, the deeper water: the as is the Heilegen before written: and when you see the Heilegen as it were two ships length a sunder: there you may bring saint Lamberth by North the sandhilles. Or when you are cleere past them, you may keep the halfe a fatham a sunder in sight, & hale so out wards a good while: and to come in at the Wellings from without, then keepe saint Lamberth as is aforesaid, till you haue brought the Heilegen in one, then you must bring saint Lamberth three or foure fatham open to the Northwards. and after gouerne your selfe by the marks of the steeples of the abbey, as is before written. And if it be such weather that you can not see the steeples of the Abbey, then beare in Northeast vpon a flood, vntill you haue brought Arderburch and saint Lamberth in one, and then hale in directly east Northeast.

Item, before Wellings a southwest & Northeast Moone makes a full sea, and at Walkherne, a south and a North Moone.

The going in at the Wellings.



Item

Item, firſt you ſhall vnderſtand that the Steeple of ſaint Katherins is a ſharpe ſteeple, and is the Steeple that ſtands on the weſt ſide on the Sea Coaſt next to the Sluce. And from Saint Katherins vp within the Land ſtandes another ſharpe Steeple, and that is Knocke. And to the weſtward from Saint Katherins by the ſea ſide ſtandes Heyes and hath a ſharpe Steeple, and is ſomething greater then Saint Katherins, and after that by the Sea ſide ſtands Liſweighen, whoſe Church hath a great flat Steeple. And from Liſweighen vp into the land wards ſtands an abbey, which is called Terdoes, and that is a Church with a little ſharpe Steeple in the middle. And from Liſweighen Weſtwards, ſtandes Blankenburch vpon the Sea ſide, and that is a Church with a flat ſteeple, but it is much leſſe then the ſteeple at Liſweighen, & betweene Liſweighen & Blankenburch vp into the landwards ſtands Wot Kerke, and that hath a ſharpe ſteeple, and ſtandes nigh vnto Blankenburch, then by Liſweighen to the Weſtward of Blanckenburch, theire ſtandes Meinwine, & that is a ſharpe ſteeple.

Item, when the Steeple of Liſweighen, and that of the Abbey of Terdoes are brought in one, then are you right againſt the vtterſand that lyes thwart of Hailand, and then are you within the Engliſh Pole, and if you haue fiue Fatham of Hailand ſide, then lies the Pole on the Larboord ſide of you, then keepe ouer Hailand in fiue or ſeauen Fatham, but no deeper, and runne in ſo long, till you haue brought the Steeple and ſaint Katherins, and the ſteeple of Knocke in one, thoſe are called the Heileghen, and then are you cleane paſt the Engliſh Pole, & then beare inwards ſo long, till Saint Katherins Steeple comes in one with a high blacke hill, and then you are againſt the French Pole.

And when the Steeple is hidden with the land that lies by North of the Sluis: then are you paſt the French Pole.

The

The markes and order to be kept when yee will saile in at Botkill.

ITem when as you will saile in at the Botkill, hauing recouered the shore, you shall bring the steeple of Middleborough southeast of you or thereabouts. And goe so in till you haue west Capplen east southeast from you, and then you shall see the Church of west Capplen come in a glaid of the sandbankes, then keepe the Church so of you, so long till Saint Aetens comes past east Capplen, and then are you past the shalow. Then runne inwards towards the shore to Flushing.

How you shall saile in at the Doerloe.

ITem, when you pretend by Gods grace to saile in at the Doerloe, bring the high steeple of Middleborough to the northwards of the flat steeple, and also a little from thence the two south towers almost together, the innermost as it were within the length of a Capstain barre from the vttermost, and run so into Flushing east and by south, or thereabouts is the course. And the southbergben are two sharp steeples standing betwixt Middleborough and Flushing.

Item, East Capplen is a sharpe steeple: west Capplen and Saint Aetens are likewise sharpe steeples. That standes from it to the Eastwardes, and is much higher then East Capplen.

Selland.

ITem, the land on Selland side lies alongst southwest and northeast, and a south southwest moon makes a full Sea.

The Clocken deepe by Flanders side.

ITem, when as you will goe in at the Clocken deepe, you must bring west Capplen in one with Saint Katherins church by Clocken, and so goe you in at the best deepe, and Saint Katherins steeple is the next steeple to the Sluis by

the

the water side, and those other steeples standes vpinto the landwards, and after that Heyst, and then Blancken-Church that hath a flat steeple: after that, there stand three steeples to the westwards.

The Coast of Flaunders.

ITem, on Flaunders side, the Coast lyeth alongst East Northeast, and West southwest, and a south or north Woone makes a ful sea at the shore. And without the sholds a southwest or northeast Woone: and alongst all the coast of Flaunders in the vttermoste Channell, it is not in any place aboue fourte and twentie fatham deepe.

The Swine.

ITem, if you will goe in at the Swine to come in, the wind being contrarie: then take the latter end of the flood, and the first of the ebbe. And when you will saile in at Heyes deepe, you must bring the foure Beacons of Heyes which standes by the Spill in one, ouer Coze at Heyes: and then shall you goe in at the best deepe, and so you shall goe farre enough from the vtter sand: and so you may beare on to the Westings and Northeast. And you shall vnderstand, that Ancheuisen, Vuisen and the Swine, doe keepe all one in the time of flowing and ebbing.

Item when as Monkerke lies due south southeast from you, and that you can then but see it vpon the hatches, then is there a flat of two fatham deepe at a lowe water.

¶ The order and course of the streames and tides alongst the Coastes of Flaunders, Normandy, and of Brittaine to the Seames.

ITem, first you shal vnderstãd, that alongst all the coast of Flanders & of Sealand, the flood runneth to the eastwards, & the last quarter of the flood, ẏ streames sets to the seawards, & the last quarter of the ebbe to the landwards. Where are sand banches about which, as well at sometimes of the flood, as at sometimes of the ebbe, there goeth no streame at all.

If you come to an anker by east of the Nesse in ten Fatham you shall bee well defended for a west southwest winde.

Item thwart of the head, the flood sets in Northeast and by north, and the ebbe sets out southwest and by south.

Whosoeuer will come to an ancker at lands end of England by Douer, let him cast ancker and ride at fiue or 6 fatham, and he shall ride well for a south winde.

He that will come to Ancker by the Gulles, let him ride at fiue fatham, and saint Margets Church shall beare south southeast to him.

And whosoeuer will come to ancker within saint Margets, let him ride at fiue, seauen or eight fatham.

Note, that from Odend to Saint Katherine the Flood sets east northeast, and the ebbe west southwest.

Betweene Grauelin and Dunkerke the flood runnes Northeast and by North, and the ebbe sets southwest and by south.

From Wolterland to Grauelin the flood sets North northeast, and the ebbe west southwest.

From the Nesse to Wolterland the flood sets North and by east, and the ebbe sets south and by west.

From Bullen to Blacknesse, the flood sets to the northwards, and the ebbe to the southwards.

From Staples, to Bullen, the flood sets north northeast and the ebbe southwest.

From Cane to Staples the flood sets northeast and by north, and the ebbe southwest and by south.

From Deepe to Cane, the flood runnes northeast and by north: and the ebbe southwest and by south.

From Fecam to Deepe in the faire way, the flood sets Northeast and by east, and the ebbe southwest and by west.

From Weresleete to Fecam, foure or fiue myles of the land in the faire way, the flood runnes east northeast, and the

the ebbe sets west south west.

From Berefleete to Saineheen: the flood runneth east south east: and the ebbe west north west: the fairest way: and you may not come any nearer them, 12. fathams.

Item from Berefleete into the Bay of Hags: the flood sets southeast and the ebbe west Northwest.

Item from the Cape of the Hagge, to the Island called Alderny: the flood sets northeast, and the ebbe southwest: and by the race of Blanchey it is so likewise.

Item, from the Caskets to Berefleete, the flood sets to the east wardes and the ebbe westward.

And betweene Britany Bay and the Caskets, the flood sets northeast and by north, and the ebbe southwest and by south.

Item from Garnesay to the Caskets, the first quarter flood runneth South southeast, and then after northeast and the ebbe southwest.

Item at [illegible] runneth East South East and the ebbe west northwest.

Item from the [illegible] shore, the flood sets east and by south, and the ebbe West and by [illegible]

Item from the Fourne to Saint Mathewes de Lyons, or the Ile of Ma[illegible] the flood runnes east and by north, and the ebbe west and by south.

Item, from Saint Mathewes to the Fourne, the flood runes north and by east, and the ebbe south and by east.

Item from the race of Fontenie to saint Mathewes, the flood sets North and by East, and the ebbe South and by west.

Item right into Vshant North northeast of, is a place which is two and fiftie fatham deepe: and no ship can ride there, for the tide goeth round about as a whirle pool.

Item from the Seanes in the broade sand betweene that and Vshant, the flood runneth east northeast, and the ebbe west southwest.

Item, from Wolterland to Gramelin, the coast alongst lyes northeast and by east.

Item, Wolterland lies off of the before written Rockes northeast, and a little to the Eastwardes, and are distant 29. leagues.

Item, the Rocks which lie without the Cape of Caule, lye north northeast from Swine head, and are distant nine leagues.

Item, Sainhead lyes from Berefleete east and by south and is distant 21. leagues.

Item, Berefleete lyes from the Caskets east & by south, and are distant 16 leagues.

Item, the Caskets lies from the Fourne northeast, and a little to the Eastwards, and are distant three and fortie leagues.

Item, the Caskets lyes from Saint Powle de Lyons northeast, and are distant 33. leagues.

Item, Garnsay lies from Saint Powles Northeast, and a little to the eastwards, and are distant [illegible] leagues.

Item, set Ties lyes from Saint Powles east northeast, and are distant 12. leagues.

Item Saint Powles lyes from Vshant East & by north, and are distant 26. leagues.

Item, the race of Fornende and the [illegible] Denmarke, northwest and southeast and are distant [illegible] leagues.

Item the course from Belille to Denmarke is west northwest, and so you shall goe cleare without the Pens, and it is from the wester Denmarke, to the southeast end of Belille 24. leagues.

Item Belille lies from Vse northwest, and it is from the northwest ende of Vse, to the southeast end of Belille 16. leagues.

Item the course from the tayle of Vse to Vse, is West northwest, and it is from the tayle of Vse to the northwest end of Vse 13. leagues.

Item, whosoeuer will anker by the Caskets or Yaggerlet

let him go with the land, within three or foure cable length of the shore, for feare of the banke which lies out from the land in foure or five fathom. till you come at the Caskets, and then when yee come unto before the Village, then let fall your anker at five or sixe fathom: and the barke doe lie from Seine head south west.

Item if you will anker before Deepe, bring the Church and the gibbet in one, and then let your anker fall at 10. fathom at a full Sea: and at a lowe water at 7. fathom.

Item, if you will anker in the Foslis by Fecam; you shall bring the mil and the fire Beacon in one, and keeping them so you shall lie from the single anker between the head of the Horderelles and Reihem. And a ship that drawes a fathom and halfe water, shall have halfe sand or better: and you shall finde the Foslis, for there you have 11. fathom and a halfe at a low water.

Item, who soever will anker under the Nesse: hee must let fal his anker before Coudrey at tenne or twelue fathom, and if you goe in any further, you shall have foule ground.

Item you must note when as you have the west end of the Caskets south from you, being fours leagues or there abouts off there you shall have it eight and thirtie or nine and thirtie fathom deepe, reddish and stonie ground, & likewise many white stones: and there betweene Caskets and Portland you shall have 40. fathom deepe.

Item he that will goe to Garnsay, must saile to the cape of Roketine, that is the westermost parte of the Iland, and let him saile to the sowthwarden of that Cape three or foure Cable length. And then he shall go in alongst that souther side untill ye see the Castle, and when ye have the Castle thwart of you, then anker at five or sixe fathom.

Item, he that will anker before Sherbrocke, let him cast anker before the Castle at fyre fatham, and he shall haue good road for a west northwest winde.

Item, without the west end of the foreland of Wereflet, lye rockes which are drye at a lowe water, and lye a leagne from the shore, right before the great sandy Bay.

Item, he that will anker before the Hooke, let him kepe off a good way from the Headland, and then ye shall see two Churches westwards off from him. the one vpon the high land, and the other Church beloive. And when you haue brought those two Churches in one, then come from anker at a lowe water at fyre fatham, and at a full sea, at nine or tenne fatham.

Item, S. Powles and Vlhant, are distant 25 leagues, and lye the one from the other West southwest, and East northeast.

Item, he that will sayle to the Ile of Wale before Saint Poule de Lions, ye shall see to the southwards a great rocke and you may hale in fast by the rocke: and when ye are right against the rocke, you may come to anker at three fatham at a lowe water, and at a full sea at seuen or eight fatham. And from the East corner of the Iland, there lyes a great rocke, which at halfe flood is vnder water.

Item, whosoeuer will sayle into Aberwracke, he must leaue the great rocke to the eastwards of him, and runne in South southeast, and when you come in by an Iland, and the rocke is to seawards of you, then you shall kery alongst by the shore of the East side. And when you haue sayled a while, then you shall see a rocke that lyeth vnder water, and the sea breakes on it continually, and lyes in the midst of the entrye: and you may sayle on which side you will of it,

it. And when you are a good way paſt the Rocke, then you may anker at foure or fiue fatham.

Item, north northweſt from Aberwracke a league into the ſea lyes a bancke, which hath but fiue fatham on it at a lowe water.

Item when you lie off & about the Pollens, then muſt you bring the Abbay of S. Mathewes, a little without the corner of Conket, but you may not bring it farre without.

Item, when you haue Pleman hill in the northweſt end of the ſayd little Iland, then are you right againſt the ſouther Pollen, then keepe alongſt the eaſt ſhore, till you come to Blanckhauen.

Item the Pollens are fiue little Ilands, which lye in a manner ſoutheaſt from Whant.

Item he that will ſayle from Blancke hauen Northwards, let him runne North Northweſt: and let him take heede of the North corner of the Blanch hauen, for feare of a great Rocke that lies before it, and then northweſt and by weſt a kit lyes a rock vnder water, which lies not aboue three fatham and a halfe deepe at a low water, and is a verie sharpe rocke.

Item, whoſoeuer will come to anker in Blancke-hauen, let him let fall his anker againſt the middleſt Bay, at fifteene or ſixteene fatham.

Item a little by ſouth of Conket, it is not aboue foure fatham and a halfe deepe at a lowe water in a ſpring tide.

Item whoſoeuer will ſayle by weſt the Wintner, he muſt keepe the corner of Blancke hauen ouer the Blanken Hongis. And ſayling ſo, you ſhall finde foure fatham deepe at a lowe water and a ſpring tide. And when as you cannot ſee Conket from the North part: then are you by North the Wintner. And if you can ſee in at the hauen of Conket, then are you by ſouth the Wintner.

Item hee that will anker before S. Mathewes corner in the beſt road: let him caſt anker at ſixteene or ſeauentéen fatham, and looke that the ſaid corner lye northweſt and by

by north from you.

Item, Saint Mathewes point and the race of Fontenie, lie the one from an other north and by west and south and by east and are distant 5 leagues.

Item, the corner of Saint Mathewes and the point of Croudon lye the one from the other east south east and west north west, and are distant 3 leagues.

Item, the Collier lies of Saint Mathewes point south south east, and something to the East in deep two leagues.

Item, the Hen with her Chickens lyes by the West corner of Croudon, & Clers you may ride and conning at a high water.

Item, the Rock called the Horne lies in the mouth or entry of Brest, & to the Southward of the Mouth of Brest a quarter of a league lies a Rocke which you may ride by as you sail by the side.

Item the Falconers lies a little from Croudon a little to the southward and it is a great high rocke like unto a Sayle with sail if ye go from Croudon by the mouth of Fontenie.

Item west south west from the Collier lies the Egge off, lies a Rocke no deeper then 6 fadom at a low water.

Item, when you are forced to lye off and on, keep about the Collier and the weather is fair you may round the Collier then keep the Collier on your starboard side but the corner which lies from the north west of the Abbey: and then you cannot [illegible]

Item, when you are [illegible] the Barbolow, and when you [illegible] in one, then are you against the Castle [illegible] see the Colliers bredth about the corner, then you may [illegible] you will fall hard by it.

Item when you [illegible]

farre as you can well see the same from the Decke, then dooth the East corner appeare the highest part of the Iland, e the corner is to the eastwards verie steepe downe, and then the land is plaine almost to the west point, and the west point something steeping.

Item, when you are northwest and by North of Vshant then may you see through the point which is to the southwards of the maine Iland, and when you are off of Vshant Northwest and by West, then is that point shut in on the shore.

Item, when Vshant beares north Northwest from you, then doth [illegible] as it is heere aboue demonstrated.

Item, when you are off of Vshant northwest and by west, or [illegible], then lies there a great Rocke of the northeast pointe, but you cannot well see through between that rocke and Vshant from thence. And alongst the northwest side of Vshant it is all full of great flat Rockes, and lye all under water, and by the West end a little from the shore, there stand rocks as it were two little hillockes.

Item when you are West and by North from Vshant, then shut [illegible] another rocke to appeare out at the north end but you cannot [illegible] through betwixt the rock and [illegible]

Item, when you are the West of Vshant, then may you see two great rockes lying without the northwest corner of it: and you may also see through betwixt the corner and the rock [illegible] lands seemes then to be all plaine aloft, seeming [illegible] place almost like high.

Item, when you are south and by west from Vshant, so far off as you may well see it from the Hatches or Hull of the ship, then come out of the bay, you shall see the land northwest and all ragged with many rockes, and at

the

the eaſt ſoutheaſt end lyes a round rocke, and you may eaſily ſee betwirt the Rocke & Vlhant. And then a little from that eaſt ſoutheaſt of you, you may ſee the Pollens which doe lye in two little Ilands, and there lyes yet other three Ilands towards the maine, but thoſe you cannot ſee from hence, and they lie euerie one a good way off from an other and there lyes many great Rockes about that Iland that lyeth next to Vlhant and is full of Hillocks.

Item, a Bowe ſhoots from the point of Konket, lies the Mintner, and at a lowe water you may ſee it, it is a little flat round Rocke, and you may ſaile round about it.

Item, the courſe from the Fourne to Blanchie hauen, is Eaſt, and from the Fourne to Blanchfabion Bay, South ſoutheaſt.

Item, when you will ſayle from Saint Mathews point into Bzeſt or Croiſon, keep the ſouthermoſte Iland of the Pollens open to the Southwards of Blanck Pongie, and goe Eaſt Southeaſt in with Bzeſt, and ſo you can take no hurt on the noꝛth ſide, foꝛ it is bzoade enough.

Item the Pollins are fiue little Ilands, and the higheſt of them is that next to Vlhant.

Item, on the ſhoꝛe at Fontnes head, a Southweſt and a noꝛtheaſt Moone makes a full Sea.

The Keyſer.

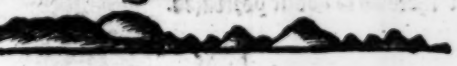
Item

Item, the Deames lye off into the sea, 3. leagues west northwest.

Item, when you will anker in the race of Fonteny, you must anker at fourteene, or at fifteene fatham.

Item, when any man will passe the race of Fonteny, let him set his prowe to the North northeast, and let him take good hed of the Launder, for ẏ flood sets directly towards it, and there is a sonken rocke hard by. Also, hard by the Keiser there lyes a flat rocke, in the race on the easter side.

Item, if you come out of the sea with Saint Mathews poynt throngh the broad sound, you shall see a high land up in the land eastwards, with three hils as it were three heads, and the northermest is the highest, and halfe a league to the southwards, there lyes an other high hill, and is the highest about the high land.

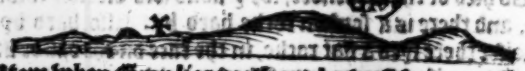


Item, when the Sheet beareth north from you or thereabouts, so as you may see it out of the top, then it riseth as heere aboue is shewed: and the ground is smal white sand, and many smalle Shels in it: and it is there seauen ẏ fifty, eight and fifty, and nine and fifty fatham deep, and you cannot from thence see the Deames out of the top.

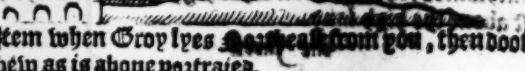
Item, when you are three leagues from Groy, or thereabouts, then it sheweth thus as is set forth: and Groy and Bellisle riseth almost of one fashion, and lye the one from the other North northwest, and South southeast, and are distant seauen leagues: and vnder Groy is likewise verye good riding.

Item,

Item when Groy lies east northeast from you, then it sheweth as is heere above described.



Item when Groy lies North and by West from you, then it sheweth as is above figured.



Item when Groy lyes Northeast from you, then dooth it shew as is above portraied.

Item, when Belille beares North Northeast from you, then it sheweth like as is above portraied.

Item the point of Saint Gildas and Glanons at the entring of Penodet lye the one from the other southeast and northwest, and are like and equal leagues. And for to eschew the danger of the Sholdes in this Channell, let these markes following be well remembred, and you cannot doe amisse.

There is lying betweene Glanons and the Ile of Moton a ledge of Rockes, and to goe cleere of them, you must leave one third part of the way towards the Glanons, and the other two partes towards the Ile of Moton, and so you may saile without feare.

Item, when any man will sayle into Penodet, hee must borough hard by the maine land, and the point of Glanons shall beare Southeast of him: then let him goe Northwest

till

till he come before the haven, and there he may anker at foure fatham.

Item, whosoever will saile out of Cantperto goe through betweene the Ile of Groa and the Ledge, he must saile hard by Groa, so nie as a man may throwe a pound stone a shore, and then goe southwest and by south, and when you are come out with Glanons, then you may saile boldely without danger to Penmarke: they lie the one from the other east southeast, and west northwest, and are distant 9. leagues.

Item when you are West of Belisle, from the Northwest parte of it three leagues from the land, then booth it shew thus as is here portraied.

Item, from Belisle to Ys, the courses southeast and northwest, and are distant 16. leagues.

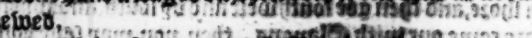
Item, when you will anker at the east end of Belisle, bring your sight a little to the westwards of the Hill: and anker in ten fatham, and ye shall ride wel for a northwest winde and for a southwest and by west winde, and there is indifferent good ground, great red grauell: and when you will ride on the Northeast side of Poldye Bay, anker at 11. or 12. Fath. & then will the east point couer you for a southeast winde. And for a west Northwest winde, set ouer againe towards the sharpe steeple, & seeke no better depth then twelue or thirteene Fatham and hee that will, may ride in eight, ten or twelue fathams.

Item, he that will saile from the inner parte of Belisle to Glanons, he must goe Northwest and by west, till hee come against the the point of Glanons, which is called saint Gindalf, because of Sholds that lye there betweene Glanons and Groy.

Item

Item when Wse beareth southwest and by south from you, about halfe a league off, then doth it rise thus as aboue is shewed.

Item, Wse is a league and a halfe in length.



Item, when Wse dooth beare north northeast from you: then it shewes thus as is aboue figured.

Item, he that will ancker vnder Wse, he must let fall his ancker at seauen, eight or nine fatham, for it is no deeper there, and you may not ryde there at lesse then seauen fatham, in the northeast syde is the best Roade for Wse but beware of a Roche that lieth at the easter end as you come by it, for it is verie dangerous.

Item, the course from Wse to the Ryde of Diller, is East southeast and are distant 1. leagues.

Item, whosoeuer will saile from Wse to Diller, let him not come any nearer the maine land of Larmester, then 12 fatham.

Item Diller and Wse lye the one from the other North and by west, and south and by east, and are distant a great kenning, and in that course lie many holdes.

He that will saile from Diller towards the Baye, let him beware of the Monkins ledge, and let him goe east north east, for the Castle of Larmester standes on the east syde of the Abbey. And when you haue brought those two markes in one, then you must set thwart ouer to Pietermein. And from Pietermein you may verie well goe east Southeast, till you haue brought the Castle of Larmester and a tree in one then you may ancker at 6. or 7. fatham, where you list, it is soft ground.

Item, he that goeth without Bellille bound for the Bay, he

hee muſt goe eaſt ſoutheaſt with Piller, and it is diſtant from Bellille fourteene leagues. And then from Piller to the Monkens, the courſe is eaſt northeaſt: and are a league a ſunder, and from the Monkens to Pictremein, the courſe is due eaſt, a ſmall league of.

The markes to goe into the Bay.

Item, when you ſaile into the Bay, you ſhall ſee a little church ſtanding vpon the high land, you muſt keepe that Church in one with the land of the Collets, and ſo you ſhal goe in at the beſt of the Bay. And when you haue the hauen of Bremdie open, then you are directly thwart of the ledge: when you are paſt that, then you may keepe alongſt by the ſhore of Collet in fours fatham and in the Bay, a northeaſt and by eaſt Moone makes a full ſea.

Hee that commeth to ride vnder Bellille before Saint Powles, may ride at 13. 02 14. fatham, and if he will ancker before Pogemelſon, hee muſt ride at 21. 02 22. fatham.

And he that will ſaile inat the ſouth Pertrees, let him goe alongſt by the ſouth ſhore in 8. 02 9. fatham, and when he is come as farre as ſaint Maris, then ſhall hee keepe the tower of Rochell right ouer the Wood, which lyes to the ſouthwardes of the other point of Rochell, and when the corner of the Wood beareth northeaſt of you, then he may ſet his courſe ſouthwards or northwards without danger.

Item, hee that will ſaile by in the north Pertrees, let him edge from the north ſide, for that is the ſholdeſt, and the ſouth ſhore is ſomething deeper. And when you are againſt the Blackhouſe, then ſhall you haue 8. 9. 02 10. fatham at the taile of Apſe, they lie ſoutheaſt and northweſt, then keep neare to the north ſhore, till you are thwart of the Wood, and the ſouth ſhore from the Monaſtarie is flat. and when it is halfe floud you may goe ouer with a ſhip that drawes twelue foote water.

Item

Item, he that will ride thwart of the Wood, muſt let fal his anker at 7. or 8. fatham, and there is ſoft ground.

Item, the tayle of Ails lyeth eaſt ſoutheaſt and weſt northweſt.

Item, the ſouth Pertries lyes from Rochell: from the roade of Charle de Bloys, weſt ſouthweſt into the ſea.

Item, you muſt haue the tide to ſayle from Rochell to the roade of ſaint Georges Iland: and then forth to Bayage, and your courſe from the roade of Rochell to ſaint Georges Iland, is ſouth ſoutheaſt, ſomething more ſoutherly, & they are diſtant two leagues.

Item, when ſaint Martins Iland lyes northeaſt and by north from you: it ſeemes to you as it is heere about portraied: and the land lies eaſt ſoutheaſt, and weſt northweſt and it is of length foure leagues.

Item, when you come in by the ſouth Petris, then take good heede to the ſouth ſhore of Oleron, for there lies out a great ledge of Rockes that breakes alwaies: and it lies not far off from the Iland of Oleron: they are called the Dogs, and you may boldly beare alongſt by ſaint Martins Iland in 6. 7. or 8. fatham.

Item, the Lauerdon lyes a great league from the point of the Boſſe, and in a ſpring tide at the lowe water it is drie and vncouered. And you may verie well ſaile through betweene ſaint Martins Iland, and the Lauerdin: for it is deepe enough, and then when you ſee the great tower at Rochell cleane without the Boſſe: then are you cleare of the Lauerdin: & in the Boſſe there is at a low water 5 fat.

Item a ſouthweſt or a Northeaſt Moone makes a full Sea there.

Item, when the white flat tower in Rochell (which is called Duke Charles tower) commeth to the ſouthwardes

of

of the point of the buried Iland, then are you right against Wangert, and then you may boldely saile into the Iland of Oleron.

The groundes and deapths of Brittaine.

Also, hee that is south southwest from the pole head of Burdiaux 9 in seauen 9 twenty fath. hee shall see sandhills to the southwards. And he that will saile from the pole head of Burdiaux to Rochell, 9 will come in at the 12. Peretrées, let him not run any neerer then 11. and, then thirteene or foureteene fatham.

Item, at the ending of the Peretrées, you shall haue 13. or 14. fatham: take no lesse then that deapth.

Item, when you are well northwest from the south Peretrees, and about 9 great leagues from the shore: you shall haue foure and twenty fatham, and grosse red stony sand.

Item, if you be [illegible] from the pole head of Burdiaux and haue [illegible] fatham, and will goe with the Pole head, then goe northeast, and you shall not saile long, but you shall haue fiftie three, and fiftie fatham. And thereby you shall perceiue you be in the right course to the poleward. And then haue fine and twentie fatham: then you shall see the tower of Cayson: that lieth east 9 by south of the polehead, and the same tower lieth East southeast of the welker Swatch.

He that is betwixt Belliſle and Vſe in 74. Fatham, shall be from the land of Poito about twentie 9 three leagues: and if then he saile towards the land thirteene leagues, hee shall finde but 40 fatham.

He that is from saint Ellens southwest, 9 hath three and thirtie fatham: hee is about nine leagues, from the shore and when he comes to seauen and twentie fatham, he shall see the land if it be cleare weather.

Item, to the westwards of Oleron when you are two ken-

nings from the land: you shall haue 20. fatham, And west northwest in the Sea from Olleron, about eighteene leagues lyes a ledge of Rocks which is called the Loper, and is not aboue three fatham vpon it at a lowe water.

Hee that commeth from Rochell outwards by the North Peretrees, let him keepe in 15. fatham, and he shal not need to feare the Barges of Olleron, for hard by the Barges you shall haue twelue Fatham. And hee that keepes this course alongst West Northwest, hee shall finde without Vse thirtye Fatham. And betweene Vse and Bellille in the faire way or Northwest course hee shall finde thirty fatham, and in the inner channel fiue and twentie fatham.

Item, without Vse, being within sight of the steeple of the Church, you shall haue eight and fortie fatham, and 2. kennings from Vse, you shall haue fortie fatham [illegible]

Item, he that is southwest from Bellille, and hath seauentie two fatham, he is fifteene leagues from the Iland. And if he be southwest from the west end of Bellille, and haue seauentie fatham, he is then twelue leagues from the land, and if hee bee against the middle of the Iland in fiftie three fatham, he may see the Iland out of the Seconds.

Item being southwest from the west point of Bellille: and as far off as you may in a cleare weather see land vpon the Hatches, you shall haue about fiftie fatham, and the ground is like Mustard seede [illegible]

You shall haue the depth without the point of Bellille, about fiue and fortie Fatham: come no neerer the land by night.

From Bellille to the Seames, coming neere the Land by night then fiftie fatham.

He that sets forth from Bellille, and goeth west and by North, and keepes on till he come the part of the Glanons, shall finde fiftie or fiftie fatham, and there lie Rockes without Glanons in the faire way, and on both sides of them is about fortie fatham.

Hee that is without Penmarche in fortie fiue Fatham,

saying

sayling from thence northwest, he shal double the Seames, and within the Seames he shal finde fine and fifty fatham come no nearer by night for feare of the Bridge, for that Rocke lies a great way in the Sea west southwest off.

From the Seames, two leagues and more into the Sea lies a great ledge of Rockes, and between the Seames and Ledge is 50. Fatham, and there is vpon one part of the Ledge but 7 Fatham deepe, & 12. Fatham in some places.

Item, three leagues to the southwards from the race of Fontenie, you shal finde 64. fath. & the ground is something soft.

Item, betwixt the Seames, and Vshant is 56. Fatham & hard by Vshant you shall haue 45. fatham. And also far in the sea you shall likewise haue the same deapth, and therefore it is perilous to trust to the deapth there.

Item, seauen leagues without Vshant, at the entring into the Sleue, you shall finde 70. fatham, and betweene Vshant and Aberwracke, in the faire way is 40. fatham.

Item, in the course betweene Vshant and Sillie, which lye southeast and northwest, you shal finde 70. fatham.

The Colour of the ground in sundry soundings.

IN primis, he that soundes thwart of Glanons, shal finde small blacke sand.

And he that soundes against Penmarke, shall finde soft grauell like ware.

He that soundes against Fontenie head, shall haue redde sand mingled with blacke.

He that soundes beetween Vshant and the Seames, shal finde great redde sand, and some small red stones, and some blacke mingled withall.

And he that soundes being thwart of Vshant, shal finde small white sand mingled with white shelles, and certaine thinges like white Hackes teeth, and then he hath Vshant northeast from him. And if he finde all alongst smal things like needles, then Vshant beareth from him southeast.

And if he cannot well iudge by the groundes, let him then beare to the northwards: and if he finde deeper water then he is in the holding of the Seames, open the broad sound.

And if he be betweene Vshant and the Seames in 70. Fatham: then you shall haue the ground small blacke stones with blacke sand. And if he finde the sounding to bee great red sand, then hee must stand to the northwards till he finde white sandy ground: with long small things like Hackes teeth, and then he shall knowe thereby that he is in the entring of the Seine.

He that sets out from Silserge: must goe north northeast to goe without Vshant: and when you haue 10. fatham then he is 19. or 20. leagues from Vshant: and sayling on forwards, he shall haue 70. fatham, and then hee is a 11. or 12. leagues from Vshant: and if hee sound and finde small whole shels, and little stones like wars, then hee is thwart the Seames. And finding this ground, let him stand northwards, and if it bee on a flood, let him take héede of Vshant.

Item, if you bee betweene Vshant, and the Iel of Walle, in 60. fatham, you shall finde in the sounding small stones as big as beanes, and thereby you may know that you are on Brittaine side.

Item, if you be about the lands end of England, or about the Lesart in 70. fath. then you are from the land 17. or 18. leagues, and you shall finde in your sounding small blacke stones, mingled in great red sand.

And if you be in the same course at 60. fath. then are you 12. or 13. leagues from the shore, & there your ground shall be great red sand, and vnder it long small white things.

Item, if you finde the like deapth towardes the coast of Corenwall, you shal not see the land so soone as you think, for you shall haue that deapth indure a long time.

Item by the Lyzard it is shore deepe 25. or 30. fatham & the land hard by.

Item southwest of Sillie, the ground is full of all sortes of little stones like the parings of Cheese, and white small

shelles

Item, to the southwards of Sillie, the ground is grosse sand.

Item, to the [illegible] of Sillie the ground is red stones and fine white sand.

Item [illegible] of Sillie, there is the ground likewise small [illegible] white sand.

Item in 37. and 65. fatham, the ground is shelles and whitish [illegible]

Item [illegible] small blacke stones something long and [illegible] grosse sand, that sheweth the entring of the Seine.

Soundings along the Coast of Brittaine.

ITem if you bee on the Coast of Lyons betweene Vshant and [illegible] Bertie Fatham, you are then within two leagues of the land, and take heede you come no nearer by [illegible] Fatham, for you shall see Kaie Brittaine and the [illegible] night.

Item Within 2 leagues of Aberwracke, you shall have 50. fatham and three leag from the shore is there 56. fatham.

Item if you be three of [illegible] Iles Northeast 9 tenne leagues, you shall [illegible]

Item, if you sail Southwest from the Caskets 13. or 14 leagues past Garnesay, and from thence to Set Iles in the Dutch course [illegible] 35. and 40. fatham.

Item, if on the day you lye off and on betweene Aberwracke and the Foure [illegible] come no nearer the Rockes then 35 or 40. fatham, and take good heed in the night.

Item, if you lye off and on in the day time betweene the Ile of Wase & Lanterger, you may come within 25. fatham of the maine without danger.

Item, he that comes with Dragnesse West southwest from Set Iles, let him come no nearer by night then 40. Fatham.

The course to be kept sayling from Bullin to Calais.

The course from the Killiars or Calis of Calis, to Wic is
[illegible] northwest,
and of Calis is 14. leagues.

Item, [illegible] by the northwest, and
it is from the Garnyes [illegible] end of
Bellin, 16. leagues.

The course from Bellille to the [illegible] Denmarke, is
west northwest: and to pass [illegible] enough off
the Pelmes, and from the [illegible] northwest
and of Bellille: is 19. leagues.

Fontenis or the Nase, lies from the [illegible] Denmarke:
northwest, and are distant 8. [illegible]

Saint Powles de Lyons lieth from [illegible] east and by
north: and are distant 16. [illegible]

Set lie lyes from [illegible] and is
distant 12. leagues.

Garnesey lies from [illegible] and a little
to the Eastwards, and are [illegible]

The Caskets lies from [illegible] and are
distant 28. leagues.

The Caskets lie from the [illegible] and a little
to the eastwards, and are [illegible]

Peresleete lies from the [illegible] by South, and
is distant 16. Leagues.

Deine head lies from [illegible] and by north, and
is distant 21. leagues.

Item, the Rockes [illegible] without the Cape of
Caus lye north northeast of [illegible] about 5. leagues.

Blacknes lyes from the said [illegible] of Caus northest
and a little to the eastwards: and is distant 56. leagues.

From Blacknes to Orancling, the land lyeth alongst
northeast and by east.

And all the Coast of Flanders lyeth east northeast and
west southwest.

The

The lying of the Headlands of the Coastes of Portingall and Spaine.

IN primis the point of Farne or Cape saint Mary, lies from the Hauens of Lisbona, which lie at the east point of the entring of the Riuer of Lisbon east and West distant 18. leagues.

The Cape saint Vincent lyeth from the Cape of saint Maries, West and a little to the Northwards, and are distant 18 leagues.

Cape Picher lyeth from the Cape of saint Vincent, North and by the West two and distant 22 leagues.

The Cape of Rockatemper lies from Cape Picher northwest and by north and is distant 8. leagues.

The Burlings from Rockatemper lye north northwest and are distant 18. leagues.

Cape Finister lyeth from the Burlings due North and are distant 48 leagues.

The entrance into Bayon lyes from Burlings, north and by east 55 leagues.

The Hauen of Bayon lyes from Cape Finister southeast and by south distant 16 leagues.

The entring into the Groyne lyes from Cape Finister southeast, and is [illegible]

The Cape of [illegible] from Cape Finister due north and is distant two leagues.

Sillerge lyeth from Cape Ledan Northeast and by east, and is distant [illegible]

The Cape [illegible] Sillerge East northeast, and they are distant 9 leagues.

The Hauen of Farne lyes from Sillerge due East, distant 7 leagues.

Matingal lyes from Cape Peter Northeast and by East and is distant 8 leagues.

Matingall, [illegible] Cape Penate, and Pasticha-co in Biskaie, lyes out from an other east and west, and are a sum-

a funder 66. leagues.

The Iland of Saint Cyprian lyes distant from Ortingall 7. leagues.

The entring into Rebadeu, lyes from the Iland Saint Cyprian southeast, and they are distant [illegible] leagues.

The Rockes of Cappenye lye from the entring of Rebadeu northeast and by east, distant 14. leagues.

Martinchaco lies from the Rockes of Cape Ponte east, & is distant 43. leagues.

The point of Pewoger lies from Martinchaco east and by south, and are distant 14. leagues.

The point of Bayone lies from the Pewoger northeast and are distant nine leagues.

Arkason lyes from the point of Bayone due North, and is distant 18. leagues.

The Pole head of Burdeaux lyes from Arkason due N. and is distant 18. leagues.

The south Peretris by Rochell [illegible] the Pole head of Burdeaux northnorthwest, [illegible] leagues.

The courses to be kept in crossing the Sea.

IN primis, the Cape of [illegible] lyes one directlye from the other, [illegible] and by North and by West: and are distant [illegible] 155 Leagues.

The Tower of Waterford lyes from the Groine, nerr hand due North, and are distant [illegible]

The olde head of Kinsale lyes from [illegible] to the eastwards, & north and to [illegible] 155. leagues.

Sillie lyes from Cisarge North and by east, and is distant 133. leagues, & keeping your course, you shall goe foure leagues to the eastwards of Sillie.

Albane lyeth from Cisarge [illegible] and are distant 108. leagues.

The

The Cape of Ottingall and the Lyzard lye the one from the other north and by east, and south and by west, and are distant 130. leagues.

The seamans the Queen of Rebadeiue doe lie one from an other north and by east, and south and by west, and are distant 94. leagues.

Item, Penmarche lyeth from Vineris north northeast, and are distant 90 leagues.

Mouts bale in Cornewall lyes from Cape Pyzo, South and by east, and are distant 136. leagues.

Fontenie lies from Ottingal north northeast, and is distant 90. leagues.

Croylles from Vineris northeast and by north distant 97 leagues.

Wellville lies from Ottingall Northeast & is distant 90. Leagues, and keeping the same course so, you shall fall seauen leagues by east of Vssant. And you must account seauen leagues are heere reckoned for a league.

Item, Yet Ile is three kennings to the Eastwards of the Fourne, and there lyeth by them a great souncken rocke in the sea, & betweene the South and by west from the land so farre as you may well kenne them, the Hatches of the ship, then it seemeth like a round low Hill, and on the toppe on the east side thereof is a little valley, and it seemes to bee halfe a ships length: and on the west side of the Hill, is likewise a little valley: and it seemes also to bee about a ships length long, and that valley lyeth the west side standeth little Hilles, and the vttermoste of the two is the greatest. And then there lyeth a high hill a good way within the land, and that lies a little to the eastwards of the foresaid rocke.

And when you are off from the said out Rock northwest and by north, then you can perceiue but one Hillocke vpon that valley that lies next the west ende of the Rock, and then the foresaid high hill lies a little to the westwards of the out rocke, and when you are a kenning from the land, west and

by north

by North of the Rocke, that is the West side of the foresaid deepe Rocke, and the West end goeth downe a little slope, and you shall see a little hill or knot on the West side of it, and then Westwards from the said Rocke lies another outer rocke, which is something lowde and standeth round. And on the east side of the Rocke lyes a little [illegible] and that is something greater, and a little [illegible] the West parts of the same, lyeth yet two out Rockes steepe and steppe-pointed like as if they were long pillers, and the east side is the longest. And between those two Rockes lies a little small Rockes not much above the water, [illegible] a man is a kenning northeast from the foresaid long hill if ye look out of the top, then it is all [illegible] out Rockes full of Rocks: and at the West end of the broadest long hill lye also lye long Rockes, and then a good way Northwards of them lies a long ledge of [illegible], and those lie in foure or five parts, and in the [illegible] three round hillocks, which are little [illegible], & the most easterly hillocke lies alone a little to the Southwards from the ledge.

And then when you are past these foure, so farre that you can see the land to the [illegible] of Blanchie haven, then is there a long high hill, [illegible] on the top all plaine, and both the sides [illegible].

The course of the tides of Portingall, Spaine, and France.

ITem, at Calis haile, on Gull full Sea Noone makes a lowe water.

At saint Lucas of Barrameda, southeast and by east Noone makes a lowe water, & so along from thence to the River of Lisbone the like.

Item all the Coast of Spaine, Gascoine, Poitow, and Britaine, till Foutenay head, southeast Noone makes lowe water.

Item, in the River of Bardeaux at the mouth, a south-east

eaſt and by ſouth moone maketh a lowe water.

Item, in the race of Fonteuie, a ſoutheaſt and by eaſt moone maketh a lowe water.

Item, at ſaint Mathewes, a ſoutheaſt & by ſouth moone maketh a lowe water.

Item a ſouth ſouthweſt moone maketh a lowe water at the Fourne.

And likewiſe a ſouth ſoutheaſt moone makes a lowe water at Aberlanſtick.

Item, at the Gleſt Bay as Roſcaw which is within that Iſland, and lieth from the Eaſtwards of the Fourne, a ſouth moone maketh a lowe water, and within the Iſland, a ſouth ſouthweſt moone.

Item, betwixt the Iſlands Ushant & Ushant, a South moone makes a lowe water, and the ſame tide holdeth to the Ile of Wiſe.

Item, in the ſame way eaſt of Ushant, a ſouthweſt moone maketh a lowe water.

Item, ſeamen lye within the Ile of Waſe, a ſouthweſt moone maketh a lowe water.

Item before S. Andrews ſouth and by weſt moone makes a lowe water.

At the Set Iles, a ſouth ſouthweſt moone makes a low water. And from thence ſouthward the Iles, a ſouthweſt and by ſouth moone maketh a lowe water.

Item, before the Manne of Brichock, a ſouth ſouthweſt moone makes a lowe water.

And from Brichock & within the haven of S. Malloes, a ſouth and by eaſt moone makes a low water on the ſhore.

And without in the faire way, from the Ile of Waſe to ſaint Malloes, a ſouthweſt and by ſouth moone makes a lowe water.

Item, from Rothelin ſaint Malloes, and from Granvile to Garneſey, thus ſouth moone makes a lowe water.

And within the roade of Garneſey, a ſouth & by eaſt moone makes a low water.

Item,

Item from Gaunsey to the Ouelets and by west moone makes a lowe water.

And 6. or 7. leagues without Gaunsey south west and by west Moone makes a lowe water.

Item betwene Caskets and Portland south west and by west Moone makes a lowe water. Caskets and 7. or 8. leagues a sea boord, a west southwest Moone makes a lowe water.

Item, from Wearfleete to the Seine, at the faire way a west southwest Moone makes a lowe water when it is a pigg tyding, then a west moone makes a lowe water.

Item from the point of Barfleur to the mouth the Riuer of Seine, a West and by south moone makes a lowe water.

Item a southwest Moon makes a lowe water in the riuer of Seine within.

From the Strowter to Some, in the faire way, a south and by west Moone makes a lowe water.

Item, at Some in the Fall a southwest Moone makes a lowe water, and at Caen, a west southwest moone makes a lowe water, and at a west Moone it is but little flood.

Item, at Bullein and at Calleis, at Gruneling, at Dunkerke, Newport, and alongst all the Coast of Flaunders a west Moone makes a lowe water.

Walter Hand

Item from Walter hand to the abbey of the Brothers a southwest and by west Moone makes a full water. And from thence to Blankenborow, a saint Katherins, a southwest Moone makes a full water. Also from Blankenborowe to Saint Katherins, a southwest Moone makes a full water.

Item, a south Moone makes a high water at Swine.

Now

Of the Hauens alongst the Coastes of Spaine and Portingall.

ITem hee that will saile into Ribadewe, hee shall goe in hard by the point on the east side and then hee shall keepe forth in the middest of the Riuer, till hee come open of the sandie Baye, and there hee may come to ancker at fiue, seauen or eight fathom.

And from Ribadewe eight Leagues to the Northwestwards, lyes the sound of Miueris, and he that will goe into Miueris with a southwest winde, hee will goe in by a high point on the west side, and then let him keepe on in the middest of the harborough, going in a good way. And then come to an Ancker, where hee shall thinke good, at tenne or twelue fathom.

Item, west northwest from Miueris, fiue Leagues off, lyes the point of Ortingall, and it is a high land and without the point there standes fiue or sixe high Rockes, which may bee seene in the Seawards, at the least two kennings off from the land. And they are Cleues, and there is between them and the land, 5. fathom.

On the east side of Ortingall is a barred hauen, and that goeth to the towne of Saint Mathewes. And hee that will ride there, let him ancker before the Village, called Karinoo, which lyes beneath the Castle of Ortingall. And that is but a quarter of a league from the Rockes, which lye of the southwards. And hee shal haue the Village Northe from him.

And Northwest from Ortiger three leagues or more, lyes, the Hauen of Seidero, which is a good harborough: and goeth Southwest in. And the Southside is a lowe point, & he that wil goe in there, let him keepe by the south side for the northside is all Rockie and foule ground. And when he hath sayled a little way in, let him ancker at fiue, seauen, or eight fathom.

When

When you are north northeast from the Cape Prior, about five or six leagues, then doth the Cape shewe as here above is set forth.

Item, the flat end is the southeast end, and the other end is the northwest end, and it lies by the Sea, and it is a high Hill and all ragged aloft. When as you are to the northward, or southwestwards from the Cape Prior, & that you are not farre off from it, then is the Cape verie high all alongst, and seemes on the toppe of it, as though there were many men sitting on a rowe, sweis one a little way from another: and in the Northside of the Cape lyes two sandie Baies one by another, and on the north northeast corner of the Cape lies a rowe of lowe Rockes, and in the middest of the rowe lyes a great Rock, like as it were a stack of Haye. And when you are come within the Cape, then is there lying on the south side of the Cape a sandye Baye, and to the south of the sandye Bay, lyes a lowe flat Hill, which is not halfe so high as the high land that lies within it: and westward from the south end of the flat hill, there lyes two great Rockes hard one by another, and to the southwards of the sandye Baye, lies a point out from the entrie, within which is the Hauen of Faroll.

When you will saile into the Hauen of Faroll, you shall beare into the sound of the Groyne, so long till you see the Hauen of Faroll open on your Larboord side, and then you may beare boldely in with it. And when you are in, then before the towne of Farol, you must go no further, for within is all shold, the hauen lies Northeast in, and it is a good Hauen for Carracks which are bound southwards.

He that wil saile into the Groine, shall keepe his course from Cape Prior South and by east towards the Groyne, and if he be without the Cape Prior, then let him kæp nearest to the East side, for the Weste side is all foule ground.

And

And he shal see to the southwards from him about two leagues off a round, a long small tower with a flat head, and dooth not shewe being high above the Sea: and southward from that tower, as you would iudge two howes theates of, there standes the towne of the Orone: and at the South-east end of the towne standes a Castle, and there is a great foure cornered Tower, which hath no couering, aboue to be seene: and to the Eastward from the Castle, about foure shyps length from the land there lyes a ledge of Rockes, and when it is a fulles, then may shal see but thyes or foure rocks breake aboue the water, but when it is a low water, then you shall see a great many. And Southward from the Castle about foure shyps length from the land, there lies a little greene Hill, and on that standes a little Church of S. Anthonies, and it seemes as though it were a little flat house, and you must leave the high Tower, the ragged Rockes, with the towne, and that greene little hil altogether on your starboord side, when yee are cleane past that greene hill, then yee may beare in with the land before the Towne, but keepe from the Sea, that ye may know your depth, and in what depth ye lie.

Item, Straight [illegible] and Orone, and there is a little Hill, and is greene on the top, where you are a little west from the Castle hill, you may then see betwixt that hill, Orone and Straight, and there is no good Roade under Straight, for the ground is not cleane.

When you are northwest and by north of Mongie, then it shewes as heere aboue is set forth.

Item, he that will saile into Mongie, and comes from the eastwards, he shall finde without at the east point a great high Rocke which is called Millen, and by it stand high

Cliffes,

cliffes, which are sharpe on the top, vnder foote 3. or 4. of them a good way standes one from another, and they lye East softly east and west from one another, sandye ooze from this point, and to the west ward about halfe table length of, there lyes a Rocke vnder water. your best marke leave to the starebord side of him, and when you haue past the Rocke, then let him go softly west and by north when he shal see the church of our Lady that is by the water side, then let him sayle directly towards it, and you shall haue ooze and mudde before the towne, or betweene the Towne and the Thrift at 7. or 8. fatham.

Item, when you are [illegible] and by west, then it shewes in this [illegible]

Item, be that will take [illegible] comes from the westwards, let him [illegible] coming to fight the point, which lies there [illegible] is a great round point, of a Ships length and [illegible] is called Bontels, going thus till you haue opened our Ladies church, and when ye can see the church, ye may anker [illegible] fatham in the sand, or ye may sayle in before [illegible] to be well roade.

Item, betwixt cape Finister and the point of the Groine lyes a ledge of rockes halfe a league into the seawards.

And whosoeuer will sayle into Spongie, let him take heed of those rockes. And betwixt Finister and the Groine lyes a great sandy Bay: where is good roding with an east wind at 10. or 12. fatham.

Item, when you haue the Cape of Finister southeast and east from you, or there abouts, and are distant from it about

bout fiue leagues or more, then it seemeth to be as is figured aboue.

Item he that will ride vnder Cape Finister, let him saile two Cable length off from the Cape, and goe so on a good League till you see our Ladies Church and then let him anker against the Church at 10. 11 12 fath but when hee hath the Cape west from him, there is no good roade for a south winde, for the ground there is foule and rockie all about.

Item, halfe a league to the southwards of Cape Finister lyes a good hauen for ships that are bound southward which is called Sarche and lyes eastwards from the Cape: to goe into that hauen, you must saile in on the North side, but you may not come very nie the North land, for it is not all cleare of Rocks nie the shore. And when you come nye the hauen, there lyes a blacke Rocke not much aboue the water, which you must leaue on the sterboord side and saile in about the middest betweene the rocks a pointe that lies towards Cape Finister, going so a good way into the northwards keeping you in the middle of the sound, til you see a sandy Bay to the Starboord side of you, and against that sandy Bay, you may anker at 10. 11. 12. fatham: and if you goe further in it is shallower.

Foure leagues fro Cape Finister, to the southeastwards, lyes the point of Mountelver, and in the course thether lye many rockes on both sides, and the most part of the rockes that may hurt you, are in sight. Mountelver is a great round hill, and there is a little tower on the top of it, and that is the north point of the Mooyes.

Hee that will saile into Hauen of Mooyes he must first bring the middle of the Mountelver right ouer a little valley, and when he comes before the Hauen, then let him run in east northeast towards Mountelver, and when hee is against Mountelver, hee shall then see another high point lying on the Larboord side of him, then he shal saile off frō Mountelver in towards the other point, and then hee shall see the Towne to the West wards before him, and then let

him saile in before the Towne, till hee come to twelue or fifteene fatham, and there anker.

Hee that will saile into Pontalegre, hee must saile in by the Iland called Bleedeones which is a flat land.

When hee shall keepe the south side, going East northeast two leagues, and then hee shall finde before the middest of the hauen a little Iland, he shall leaue that on his Larboord side, and to the southward of the Iland, hee shall see a great Tower: then let him saile directly before the tower, and there come to an ancker, at fiue, seauen or eight Fatha, and hee will ride vnder that Iland, which lies before the middle of the hauen, let him bring the Iland to the westwards of him and so ancker at 7. or 8. fatham.

Hee that will goe in to ride vnder the Ilands of Bayon, let him keepe neere to the Iland of the northeast point of the Iland, there lies a rocke vnder water, about a cables length from the point, otherwise all is cleare.

He that comes out of the sea with the Ilands of Bayon he shal not perceaue any other land but Graye Cliffes, and he that will saile in there comming from the south let him leaue the rocks which are in the southside of the Iland betweene him and the Iland, and so saile in by the middlemoste Iland, wherein the Grenadge stands. Ouer against the great sandye Baye, there is the best roade in twelue or fourteene fatham, and you may ride so nigh till you haue brought that north end of the Iland directly with that land which lies to the northwards of the Iland.

Hee that will saile into Bayon, let him saile in betweene the little Iland of Bayona, that lieth on the North side of the entrie and the towne, going in East and by north, till he bee as farre within as the lowe towne, which he shal see on the south side, and there he may ancker at ten or twelue fathom: but he must take great heede of a ledge of rockes that lie off the Iland on the north side.

Item there lye fiue or sixe rockes by the point or corner of y Cape Pasalis these he must leaue on y sterneboord side:

and

and he needes not come to anker, before he see them that in the other point that the high towne stands on.

Item 19. Leagues to the southwards of this Iland of Mayona, lies the riuer of Portugall.

Item the riuer of the port of Portugal, is a good hard hauen, and hee that will goe in there, must keep the south side neerest him. And let him take good heede of the Rockes which lie at the entring into the hauen, and that is but a shoote out in. The south side is a lower land then the north side is.

Item, eleuen leagues to the southwards of the port of Portugall, lies the hauen Lueiro.

Item, the Hauen of Lueiro, is a hard hauen, & the land by the water side is a low sandy land: To saile into this Hauen, you must take your markes vpon the south land, and those are three Beacons of maltes, those three Beacons must be kept in one, so long till you bee come almost hard by them, then you must set of northwards from them towards the other Ilande, which lies in the North side of the Hauen, and there yee may ancker at seauen or eight fathom.

Item, seauen leagues by south that hauen, there lyes the point of Leliacke by Mondego, which is a faire foreland, and from the south point of Leliacke, a mile to the east, southeastwards: there lies Mondego, which is a hard hauen.

And westward from that hauen a quarter of a league from the land, lies a hancke of seauen fatham, & behind that one may ride in 12. or 13. Fatham, it is there good ground and faire, and there is a village thereby North Northeast from the roade.

He that will ancker vnder the Burlings, let him ancker before the Eremitage at ten Fatham, hee may come to it by which side he will, for it is cleare there of danger.

Twelue Leagues to the S. southeast of the Burlinges, there lies the Cape of Rockſemper, a little within that point is the Roade of Rackales, & he that will ride there may

anker where hee lift, for there is good anker holde in euerie place, but no couert for a southwest winde.

When a league Eastwards from the Mandils of saint Gillians point, and is the northy point of the Ryuer of Lisbone, and hee that will saile in by the Northland, hee muste keepe the middle, and sayle in betwixt the point of saint Gillians, and the land of the Bachopes, till he be within one point of saint Gillians, and then let him saile on forth by the Northland till hee come to saint Katherins Bay, and then he must keepe off againe from thence towards the S. land, for feare of the Rockes which lye by the Rastelles a bow shoote from the northy land, and that rocke is at a lowe water in sight, and at halfe flood it is vnder water.

The first white Church is saint Katherins Church, which standes vppon the Northland of saint Gillians to the Eastwards by the water side, and the other Church is the Rastelles and southeast from thence in twelue Fatham, is a good roade for all windes.

He that will saile in by the great deepe of Lisbone comming from the southwards, for to auoide the land of the Bachopes on his Larboord side, and all the other sandes that breake on his Sterboord side, and then he shall see the white Sandy Baye that lies next to the Eastwards of the point of Saint Gillians, and keepe that Northeast and by northy of him, going still alongst the Bachopes shore, fayre and by these markes he may saile into the Bay of saint Katherins, and then let him keepe two third parts of the riuer on his Larboord side, and the other third part on the Sterboord, and saile on so vntill he come before the towne of Lisbone, and he that will anker before the Coupers, let him anker before the Lime kil and more a thwart the riuer, and lay the one anker at 13. fatham, and the other at 14. fatham.

He that will saile in before the Village town, let him not come neere the shore before the Coupers gate, for there lies a rocke a pretty way off, and it is ill riding thereabout in any place, because the streames turne about so there at euery

and

and it is all rockie.

Item, within a stones cast to the southwards of the Rachopes is 8. fatham deepe, and by the same sand by the south side, it is 13. fatham deepe within a Ships length of the sand. And let him that will saile out at Saint Gillians deepe, take good heede of the ebbe, for that sets sore towards the sand of Rachopes.

Item, hee that will saile in by the great deepe of Lisbone, let him bring the Castle of the Rastelles east, and by north of him, or let him bring the tower of the Rastelles to the northwards of the souther foreland, keeping them so till hee have brought the little Church at S. Gilians point North northeast, or there about from him, then goe northeast off it towards S. Katherins bay: and alwaies reckon your tides well.

He that will saile to S. Toous, hee must have halfe flood with him, and must saile east from Cape Pitcher, then hee shall see before him to the northwards, a great high land, when he is past that high land, then let him keepe the point of Cape Pitcher open a good way without the high land, going with those markes til he see the Tower to the northwards of him, then let him saile right with the Tower, till he come neere to it. And when he is as far in as the Tower, then let him edge into the middle of the channell, and ancker at ten fatham.

Item, when you are off from Cape S. Vincent West or thereabout, then dooth it shew as is above figured.

He that will ride under Cape S. Vincent, shall passe on by the first point, and saile a League further in under the other point by a red land, and there ancker at 15. or 20. Fatham, for the ground is all cleane thereabouts, and ye may

saile fast by the shore that yee may in manner leape a land.

Hee that wil saile into S. Lucas, hee shall at the entring into the mouth of the riuer of Cinill, when hee is without before the hauen, keepe the steeple or Tower of S. Lucas to the eastwards of him, and so go in at fiue fatham, & ye shall continue so at fiue fatham almoste a league. And when hee comes in fiue fatham he may ancker, and then he shall haue haue pilots come to him.

Item, to the westwardes of S. Lucas lies a sandy Bay and you may saile alongst by that in fiue fatham, or come to an ancker if you list.

Item, if a man come from the Northwardes, or North westwards then the point of Chipiona lyes thus, [redacted] & to the southwestwards about two bow shotes, [redacted] standes a castle at the vtter point of the land, and sheweth in forme as heere appeareth. [redacted] And about foure bowe shootes at the westwards of [redacted] that, are certain rocks, which at a lowe water are dry, that you may see them, you may by night come no neere to them then 12 or 13. Fatham, and then from thence to Rotta the coast is Southeast three leagues and it is all a white shore and Southeast from Rotta lyes out a ledge of rocks about two bow shots off the shore, and appeares alwaies aboue water, behinde that is the roade for small ships, And the Castle of Rotta sheweth thus, [redacted] & the village standes a little to off the Northward or [redacted] there abouts, and hath such a flat steeple, as is heere portraied. [redacted] And if you will goe with S. Marie port then goe E. or East and by south, and shun the north shore something, for feare of the rocke that lyes about the middest of the Chanel, about north from the Porkers, and if you will goe to the southward of the rocke then take heede of the Porkers, yet you may come meetely neere them, for it is indifferent cleere ground to turne in at fiue or fiue fatham.

Callis

Callis.

When Callismallis is northward of you, then dooth it ſhewe thus, as is aboue ſet forth.

Hee that will ride before Callis, let him ſaile in by the Rockes which lie to the weſtwards of Callis, which are called the Porkers, and he muſt leaue them Rockes on the ſteereboord ſide, and beare in at fire fatham or more. And when he is 3. or 4. cables length within the Porkers, that he may ſee the Towne of Callis open to the ſouthwards, or South ſouth weſt from him, then let him ancker, at 3. 4. 5. or 6. fatham. And right off the Porkers to the northward lye ſonken rockes, & there is at a lowe water but a fatham & a halfe vppon them.

Item, the markes for the rock which lies betweene Rotta and the Porkers in the channell are theſe, when S. Katherine Chappel which ſtands by weſt S. Maries Port by the waters ſide, and the houſe that ſtands vpon the high hil which you goe ouer, two theeres be brought in one. And S. Maries Cloiſter in Callis without the north point of Callis, and alſo two high hilles lying to the Eaſt northeaſt, or thereabouts from you brought together, alſo after this maner, as is heereunder ſhewed, the leſſe vnder the greater then are you euen hard by the ſaid rocke.

Item, when you are come out of the ſea, with a large winde, then keep the two hilles open in that order, as they ſtand aboue figured, but if hee keepe them ſhut in one then ye goe directly vpon the rocke.

The Tides alongst the coast of Ireland and England.

ITem, on the West part of Ireland, an east northeast, or a west southwest Moone makes a full sea.

Item to the Bay of Carmardin, in the mouth of Seuerne, and without in the Channel, & at the Womlesse, an East and by north, or West and by south Moone makes a full sea.

Item at the Iland of Londey, an East Moone makes a ful sea, & the same tide holdeth to the Holmes. And at Brisk-owe an east and by south moone makes a full sea.

Item, a northeast and by east, or a southwest & by south Moone makes a full Sea at Sillie.

Item, in Mousehole and in Falmouth an east northeast Moone makes a full Sea, and there or foure Leagues off the shore in the faire way, an east southeast Moone makes a full Sea.

Thwart of Falmouth and Foye in the middest of the Channell, an east and by south Moone makes a full Sea.

Thwart of Plimouth and Dartmouth, and all betwirt that and Portland in the middle of the channell, an east southeast Moone makes a full sea.

In Foy, in Plimouth and Dartmouth, an east and by north moone makes a full sea.

In the faire way betweene Dartmouth and Portland a southeast and by south moone makes a full sea.

In the middest of the channel outer against Portsmouth a south southeast Moone makes a full sea. And the like tide is off the Ile of Wight in the middest of the channell.

Portland.

IN the race of Portland, a southeast moone maketh a full Sea, and in the roade of Portland, an East Southeast Moone makes a full sea.

A southeast and by south Moone, makes a full sea at the Needles in Wight. And the same tide goeth to Wolter

borne

horne on the land, and 3. or foure leagues a seabord, a south and by east moone makes a full sea, and at saint Ellens a southeast moone.

And it is to be noted that the flood sets in at the east end of Wight, till the moone be at southeast or northwest.

At Calshot, Hampton, and at Portsmouth, a south and by east Moone makes a full Sea, before Hampton a south moone makes a full sea.

From Wight to beachie, a south and by east Moone makes a full sea on the shore.

At Rie in the Cammer and Winchelsey, a south and by east Moone makes a full sea, and without in the Ostune a south southwest Moone.

A south southwest Moone, makes a full sea in the roade at Dongie Nesse, and a south moone vppon the Stell, and without in the channell there a southwest moone makes a full sea.

From the Nesse to Romney head, a southwest Moone makes a full sea.

In the Channel and hard by the head, a southeast or north west Moone makes a low water.

Item, a south moone makes a full sea at Doner, and in the Downes: at Tennet, a south southwest Mone makes a full Sea, and a south or north Mone makes a full Sea at the Shore.

The course of the streames of Ireland, and England.

In primis, from the Cape of Dorsey, to the Iland called Dordon, the flood runnes north northwest, and the ebbe sets south southeast.

From Dorsey to Cape cleere the flood runnes East and by north, and the ebbe west and by south.

From the Cape of Cleere to the Ilands called Saltcis, the flood runneth east northeast, & the ebbe west southwest.

From the Cape of Ireland to the Iland of Londey, the

floods

flouds sets in northeast and by east, and the ebbe southwest and by west.

a From Londey to Milford, the flood goeth east southeast nd the ebbe west south west.

From Milforde to Caldie, to the Bay of Carmardin which is the mouth of Severne, & to the Ilands of Pomlelle, the flood runneth northeast, and the ebbe southwest.

In the middest of the mouth of S. Georges channell, the flood runneth north northeast, and the ebbe west Southwest.

In the Channell of Bristowe, the flood sets east northeast, and the ebbe west southwest.

From Sillie to the Lyzart, the flood runneth East and by north, and ebbes west and by south.

From Sillie to the lands end of England, the flood sets east northeast, and the ebbe west southwest.

From the Point of the lands end, to the cape of the Lyzard: the flood sets east, and the ebbe west.

From the Lyzart to the Stert, the flood sets northeast and by east, and the ebbe southwest and by west.

Item, in the middle of the channell against Falmouth, Foy, Plimouth, and the Stert, the flood runnes northeast, and the ebbe west southwest.

From the Stert to Portland in the middle of the Channell, the flood runnes East north east, and the ebbe West southwest.

Against Dartmouth about two leagues from the shore, the ebbe sets southwest and by south, and to the Eastward, and on the south southwest side of the entring in towards Excester, about two leagues from the shore, the ebbe sets likewise southwest and by south.

Portland.

Item, within Portland in the Bay, the flood sets northeast and the ebbe southwest.

From Portland to Wight the flood runnes east and by north

by north, and the ebbe west and by south.

From Wight to Beachie, the floud runeth East and by north, and nie to the land in 15. fatham, the floud runnes northeast and by east, and the ebbe southwest and by west

He that will saile into Dillie comming from by South, let him looke well in time, and take good heede of the rocks which lie in the middest of the sound right before the mouth, and hee may saile in on eyther side, but it is best to keepe next to the east side, and keepe the steeples or towers in the middle of the same Bay, and then he may beare in an ayker at 6. 7. or 8. fatham.

Item, when the Bel or point of Portland beares northeast and by east from you, and that you are 2. leagues or more from the shore, then doth it shew thus as before is portraied: but to the West wards is much more land then heere is set foorth, and a greate deale of the west part, the land seemes whitely to looke to.

Item, when Portland beareth North and by East from you, and that you are five or sixe leagues off from the land, then it shewes thus as aboue: & when it lies north North-east from you, then it seemes playne above and rownd to looke on. From Mongie Nesse to Mower, the floud sets Northeast and by East, and the ebbe northwest & by west, At the south foreland the floud sets northeast and by north and the ebbe southwest and by south.

Heere

Hereafter follow the hauens alongſt the weſt coaſt of England.

Item, eaſt northeaſt from Beachie nine leagues off lyeth the Neſſe, which is a faire lowe point weſtward from the Neſſe, two leagues off lieth the Cammer of Rie, a bard hauen, and hee that will ſaile into the Cammer comming from by weſt, he muſt keep Beachie open without the point of Fairlee, and beare Eaſtwards in till hee haue brought the houſe northweſt from him, & then ſayle by the Shingle in, and when hee comes at the end of the Shingle, then let him anker within a cables length of ỳ Shingle northweſt from the point in ten Fatham, it is not wide there.

Item, when Beachie lyes northweſt and by north from you, and that you are about foure or fiue leagues from the land, then it ſhewes thus: and it is a white chalkie land.

Item, he that will ride vnder Beachie hee may ancker where he will, the Eaſt ſide is all hold, and on the Weſt ſide is all good ground.

Item when Beachie lies northeaſt off from you, and that you are two leagues from the land, then dooth it appeare thus, as aboue is figured.

Beachie lies from the Caſkets, northeaſt and by eaſt about fortie leagues.

Item,

Item, when Wight beareth North west from you, and that you are [illegible] leagues in the land, there you shall haue 35. fatham, and the ground is great rough stones.

Hee that will saile in at the east ende of Wight, let him take heede of the Owers, and fetch the holding of the west side of the beauty betweene S. Ellins Church, and there he may ride in fourteene eight fatham. And hee that will saile in, let him bring the Lime kill that lies above Portsmouth, and the steeple of Portesemouth in one, & so saile in keeping two thirds of the channel on the East side and saile in to Portsmouth.

At the East end of Wight Hurst west Needles makes the entrie of the first quarter of the flood.

He that will saile in at the west end of Wight, he muste looke well to the tide, for the flood sets verie sore upon the needles, and the ebbe sets into Swingilles, and chalkie Rockes, which lies westwards of the Needles, and is verie narrow betweene the Needles and the Swingilles, and let him priedy saile with the Needles, even till he come fair by them, and saile in verie neere them, and when he is once within the Needles, then let him kape off from the land before him, because of the rocks called the Warderns, which lies on the right hand neere the shore.

And hee that will ride under the Beachie which lies on the other side, let him ancker at fourteen fatham, and if hee will goe any further in, let him keep two third parts of the Channel towards the maine land, and saile so in till hee come before the Village of Yarmouth, where the new Bulwarke standes upon the right side, and if he will saile vp to Cauthot, then he must saile on till hee may see the town of Yarmouth [illegible] and ancker neere it in the rode of Cauthot.

If you will ride without Hurst by the Needles, let him beare in and ancker before the Village in the North Channell, three fatham and a halfe water, and he shall haue the Needles South and by East from him, and at a deepe tide, he

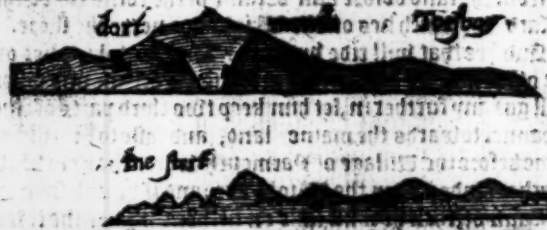
ſtond booth not riſe there aboue are fatham.

He that will ride in Portland roade, let him ancker at 7. fatham.

Item, 12. leagues to the Weſtwards of Portland, is a roade called Torbaie, and lies within the head which is called the Berrie, and Portland and that lie eaſt and weſt, and on the Eaſt ſide of the Berrie head ſtandes a Church and there againſt the Church is verie good riding at 6.or 7. Fatham.

Item, when as Torbay beares South South Weſt from you, and that you are about three leagues from the ſhore, then the land appeares in this faſhion.

Hee that will ancker vnder the fourth point of Torbay let him ride at 7. fatham, and he ſhall ride well for a ſouth-eaſt winde.



Item, when Dertmouth beares north north weſt from you, and the point of Torbay northand by eaſt of you, then ſheweth the ſtert and Dertmouth after this manner as is heere figured, and then you may ſee the little Bulwarke in the Eaſt ſide, & Sa. Patricks chappell in the weſt ſide, and a little flat Church to the weſtwards of you.

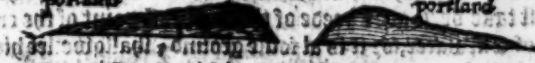
Item

Item, the Start lies from the Fourne, north Northeast easterlye, and they are distant 43 leagues.

Item, when the Start is west northwest from you, and two leagues off from it, then doth it shewe like as is aboue portraied.

Item, when the Start beares Northwest from you, and you being 4 or 5 leagues off it, then doth it shew like as is heere aboue set forth.

Portland lies from Plymouth Northeast, and is distant 48 leagues.



Item, when Portland lies well and by northerly from you, then it shewes after this manner.

Item, when Portland beareth Northeast and by North, then doth it shewe this.

He that will come into Dartmouth, let him goe directlye with Saint Patrikes Chappell, which standes on the west pointe of the Hauen, and let him take heede that he doe not bring that village which standes within on the west side of the hauen without Saint Patrickes Church, but let him keepe the vttermest house of the same Village on the East side of the Hauen alwaye right without the Bulwarke of the west side by Saint Patrickes Chappell, and then can he not take any hurt on the rockes in the Range by the West point, and when he is a little way within the point that lyes on the east side, he shall see a sharpe corner of a Cliffe, a

without

without y sharpe corner of the Cliffe lies a rock vnder water very dangerous, let him leaue y on the steereboord side, and when he is past that Rock then he may keep himselfe in the middest of the hauen, and beare in without danger.

He that will ride vnder the Stert, let him ancker in ten fathan there he shall haue clene ground: the rope is to the Eastwards of the Sert 5 or 6 leagues Northwestwards of the Sterte fiue leagues, goeth in the sounde of Plimouth, he that wil goe in there must beare in the middest of the sound directly with an Iland that hath a Chappell on it: and if hee be vnder it he may goe within the Iland: when he is so farre in as the Iland, then hee must borrough hard by the East side thereof in 6 fathom, and when hee hath brought the Iland in the southwards of him, let him anker in fiue or seauen fathom.

He that will saile into the Cattes harborough which is Catwater, let him goe alongst by the east shore, till he come before the Blockhouse at the entrie of Catwater, and hee must take verie good heede of the west point of the entry of Catwater, for it is all foule ground & shallowe, let him saile in by the Northwest point within two ships length of the Blockehouse, & then runne into the northeast & by E. about a bowes shoote in, and ancker in 4. 5 or 6 fathom.

To the Westwards of Plimouth lies a ground hedge, which is called Rams head, & south and to the westwards of that 3 leagues into the sea, lyes a ancker which is called the Edie stone, and it lies south southwest southerly from the Howe of Plimouth.

He that will ride vnder the Rams head to the eastwards may ancker at eight or nine Fathom within a bowe shoote of the Cape, for there is all cleane ground.

Item, foure leagues from the Rams head to the Westwards, lies an Iland hard by the shore, it is a little round Iland, and with small Barques ye may ride within it, and goe through betwixt the maine, & in the east side is the best comming in, and the best ridding is against the middest of

the

the Iland, hard by it to ẏ eastwarus gothin Lowe hauen.

Item, two leagues to the eastward of Lowe, lyes the hauen of Foye, and a little byeast Foye, lyes a Rocke vnder water, and so long as you can see Lowe Iland without the poynt which lyes to the westwards of it, you can take no hurt by it.

Item, Foye is a bard hauen, and at the entrie of the hauen, there stãds on either side vpon the high land, a church, and that which stands on the east side is the lesser, they are square towers something white, and hath a flat steeple at the west end.

Ye that will saile into the hauen of Foye, must haue halfe flod at the least, and let him saile in the midst of the chanel, and when he is betweene the two poynts, he may kæpe alongst which shoze he will, but the west shoze is the wydest chanel, by the stakes and tower of the steeple which stands in the west side of the hauen: and if he come in by the west shoze, then he must when he is within those stakes, bear off a little from the west shoze, almost into the midst of the chanell next to the west shoze. Before the village which lyes on the west side, is a little dock, and there a ship may lye a flote at a lowe water, oz ye may saile further in, and then you shall see a wall standing on the west side of the hauen, and a village behind it, there is good ankering a ships length bysouth that wall on the east side, but ye must ride by two Cables, oz else you may saile further in alongst by that Swatch that lyes on the west side, wherein the water mill stands, but take heed you come not to nigh the nozth cozner of the Swach, foz there lyes a rocke, and when you are a little past that, ye may rowe into the midst of the streame, there is best lying foz ships that dzawe much water: and to the southwards of the fozesaid wall, a ship that dzawes 18. foote water, may well ride a flote.

Item, there lyes within the east poynt, a village euen at the first entrye, and before the village is a pole, where two oz three ships may well lye, and the deepest is within

at the east point. And if he that comes in by the east shore, will not goe into that pole, then let him (when he comes a little way within the stakes on the east shore) fall something off, and keepe neerest to the west shore, for on the east side lyes a Flatt all alongst, until you come against the first house of the west village. And if perchance the winde were so scarce that you cannot beare in, then ye may come to an anker without, so as the ship may ride without the stakes. And then ye may warpe in with Hausers, and lye behinde the stakes, with a ship that draweth twelue or fourteene foot water a flote at a lowe water.

Item, the hauen lyes N. northeast in, till you be past the Church of the Village which lyes on the west side, and then it lyes north in, til you be past the watermill, and then north northeast in.

And he that will anker without, to tarye his tide, or for any other occasion, he may come to an anker at six, seauen, or eight fatham, so that he haue the Church that standeth on the east side, north northeast of him, for there it is cleane ground all without.

The hauen of Foye and Wuddeman, lye the one off the other, southwest and northeast.

Whosoeuer sayleth into Falmouth, let him take good heede of the rocke that lyeth without in the middle before the entring. And he may leaue the rocke on which side he will, but the deepest water is to the eastward of the rocke. And when you are past the rocke, then may you anker in the middest of the hauen where you will, at fiue, six, or seauen fatham, and take heed how you sayle in any further, for feare of the bankes which lye within. And if you will sayle within the bankes, then you must haue good knowledge of the markes of the hauen.

He that will sayle into Yelford, had need to take a quarthe flood with him, and let him sayle by the east point nigh the land at foure fatham, till he see the steeple on the southside beare south of him; then he may anker against the steeple

keeple at foure fatham. And by the weſt poynt lyes a rocke vnder the water, in the weſt ſide of the hauen.

Yet that will come to anker in the road of Mounthole, he muſt ſayle hard to byweſt of a high round hill, and to the northwards of the hilles ſide, lyes a white ledge of rockes on the ſhore, and againſt that is the road, in fiue or at ſeauen fatham, it is not verie cleane ground.

Ye that comes from the ſouth, and wil ſaile into Sillie, let him looke out in time, for feare of the Rockes, which lye in the middle of the entring, right before the mouth on eyther ſide, but it is the beſt to keepe neerer the eaſt ſide, and then keepe the Church of Saint Maries in the middeſt of the ſandy Bay, and then you may anker at fyre, ſeauen, or eight fatham.

Item Sillie lieth weſt ſouthweſt off the landes end of England nine leagues.

Item, from the point of the lands end, to the Lyzard, the courſe is ſoutheaſt and by eaſt eight or nine leagues.

Sandes at the Thames mouth.

How to knowe the mackes of the laſt, there ſtandes a thick buſhie tree vpon the foreland, and you muſt bring Margate by ſouth off that Buſhy tree, to light within two yardes length, and keepe them ſo, & you ſhall paſſe betweene the Norther and the Souther laſt, and when ye haue brought the reculuers in one, then are you out of ẏ danger of the Laſts, then keepe on your foreſaid courſe toward Sheppy, & when you haue brought the high land Sheppy to the Southward of you, then you ſhall ſee a white Church ſtanding on the North ſide, and three or foure high trees there by it, bring the ſaid white Keeple into the trees, and goe ſo into the lowerneſſe, and the you ſhal come to the ſea Rocks, and that lies Weſt Northweſt in.

At the Foreland, a south ouerth Wone makes a full sea, and the Reculuers are two sharpe steples vpon one Church, take heed you come not on the lands end at a lowe water, for there is not about two fathom water deep.

The deapths outer against England.

IN primis, the Coast of Flaunders in the right and sted channel, is not aboue 24. fatham deep.

In the midst of the chanel betweene Dotter and Blackenesse, lyes a banke, which hath not at a lowe water aboues 2 fatham deep on it.

And within halfe a league to the southwards of the bank it is 27. fatham deepe, and to the northwardes, fine and twenty fatham.

Betweene Winchelsey and Pickardie, the deapth is 26. fatham.

Item, vnder Dulderley in the channel, the deapth is 25. fatham.

Item, the channel vpeast of Beachie, two leagues off, is 27. fatham deep.

Betweene Beachie and Seine hoad, in the channel, is 38 & 40. fatham deep.

Betweene Wight and Beachie, it is in the channell, 38. & 40. fatham deep,

And three leagues without Wight, it is 37. fatham deep and it is not very cleane ground there.

Item, from Berelette to the middest of the depth of the channell, you shall finde it all rockie, and from the middest of the channell, to the East of England, it is all cleere ground,

It is very perillous to trust to sounding by the Iland of Aldernay, for hard by the land is fortie fatham deepe, and well southwest off, by the Raskets, it is eight and thirtye fatham deepe.

Betweene Portland and the Raskets, in the channell, is fortye fatham And two leagues a sea-board the Iland of Aldernaye, is a certaine place, which is but thirtye fa-

tham

tham deepe, whereas in all other places betweene Portelland, and that Iland, it is forty Fatham deepe in the channell.

Item to the south southwest ward, about a kenning from the Stert is about forty Fatham, and the ground is red sandy clay.

South southeast into the Sea from the Stert, and a kenning of it, is 45. Fatham deep, and sayling from that depth southeast a little further south, yee shall finde 55. fatham. And these uncertaine deepes are betweene Rocketo and the Stert.

Item, to the Southwards of the high land of Dertmouth in the sight of the land, it is about 43. fatham deepe, and the ground is white sand, with some little shelles amongst it, & verie little smal long things like unto such Paggots as are sometimes in Bacon.

Item, 5, or 6. Leagues southwest from the Stert is 40. Fatham deepe, and the ground is gray red sand, reddish, and shellie.

Item, 10. or 12. leagues Southwest from the Stert it is 47. fatham deepe, the ground is blacke grosse sand and shellie and little rough thinges like Paggots, with some small stones amongst.

Betweene Dartmouth and Bet Iles, in the channell is 55. Fatham, and from the towne of Plimmouth 4. leagues south southwest into the Sea, it is 30. fatham deepe faire white sand.

Betweene the Lizart and the Stert, come no nearer the land by night then 40. Fatham. And if you will ancker betweene those two heads, you shall ancker at 25. fatham, and be within the streame of the Lizeland.

Betweene Foy and the Ile of Balle in the Channell is 58. Fatham; and at the lands end of England it is 50. fatham deepe.

Betweene the Iland of Londey and Sillie, it is in the right course 40. fatham deepe.

Item ten leagues to the southeastwards, from the Iland of Saltes is but 20. fatham, and the ground is small red ozie sand.

Item betweene Milford and the Saltes, in the channel is 40. fatham.

Cast southeast from the dale of Milford, right against it about a bowe shoote off lyes a lounder rocke under water.

From the Iland of Saltes to the Cape of Cleer, in the right course is 56. Fatham, and if you come neere the land in the night than 40. fatham, for then you are but three leagues from the land.

Item, if you sound being thwart of the cape Cleer, & finde 80. fatham deepe, and the ground clammie, and small white sand, then if it bee cleare weather, you shal see the Cape out of the top, and that ground and height is to the southward of the cape.

Item southward from Dorsey three leagues from the land, it is 70. fatham deep, & the ground is grey sand mingled with small shelles.

The lying of the land of England alongst the coast.

IN primis the point of the Nesse, lies from the point of Douer southwest.

Weachie lieth from the point of the Nesse West Southwest.

Donnoze in the Ile of Wight lies from Weachie West and by South.

Item the coast alongst the Ile of Wight, lyes West and by north, and the Wight lies from Fulfers Hauen Westwards.

Portland lies from Wight, West Southwest twelue leagues.

The Hauen of Dertmouth lyes from Wight west south southwest westerlye.

The Start lyes from Portland weſt, and by ſouth 16. leagues.

Plimmouth lies from the Start, weſt northweſt five or ſeauen leagues.

Dodman lies from Plimmouth, ſouthweſt and by weſt 13. leagues.

The Lyzart lyes from the Start, WNW and by ſouth 25. leagues.

The lands end of England lyes from the Lyzart, WNW northweſt weſterly 8. or 9. leagues.

Item, it is from the point of Douer to Beachie eightéen leagues.

And it is from Beachie to Donnoze 20. leagues.

From Donnoze to Portland, is 16. leagues.

From Portland to the Start, is 16. leagues.

From the Start to the Lyzart, is 22. leagues.

From the Lyzart to Sillie, is 18. leagues.

And from the Lyzart to the landes end of England is 9. leagues.

From the lands end to Sillie is 8. leagues.

Sillie lies from the lands end of England weſt ſouthweſt, and from the Lyzard Sillie lies due weſt.

The lying of the land about the lands end of England, and of the coaſtes of Ireland.

S. Vyinis, the Iland of Londey, lies from Sillie northeaſt and by North, and are diſtant 30. leagues.

Waterford lies from Sillie, North and by eaſt 30. leagues.

The hauen at Waterford lies from the lands end of England, northweſt and by north, 31. leagues.

The hauen at Crock lyes from Sillie northweſt 35. leagues.

The Cape of Cleare lies from the Iland of Salteis, west southwest, 43. leagues, and between them lies the Old head which lies from waterford 24 leagues.

The Iland of Salteis and the Iland of Beumaries or Holihead, lie the one from the other northeast and by north and southwest and by south, and are distant 42. leagues.

The Ilands of Doxles lyes northwest and by west from the cape of Clere, and are distant 12. leagues.

The Ilands of Blaskey lyes from the Doxles North and by west, and are distant 19 leagues.

The Cape of Strauen lies from Blaskey North and by west and are distant 8. leagues.

The courses, the lying of the coastes, and the tides vpon the North Coast of England.

Orfordnes. Leistow. Yermouth. Winterton.

NOte well, that heere the land comes from the Northwardes. And first you shall understand, that the lands end and the Nesse, lies North and something to the Westward, and south something to the eastward, & they are distant two great kennings, and there a forth or North Woone makes a ful sea.

Item from the Nesse to Dyrdones, the course is north northeast and to the eastwards, & they are distant two small kennings, and a south or north Woone makes a ful sea.

Item from Dyrdones to Leistow, the course is north, and they are distant 8. leagues, & at Leistow a south southeast Woone makes a full Sea.

Item, when you haue the foreland southwest of you, and that you are about eight leagues distant from it, there are banckes of 17. 20. 23. and of 24. fatham, & the ground is red sand with white shelles, and some stonye ground like wise.

Item.

Item our Ladies bancheleyes at the head betweene Calis and Blacknes, about 7. 10. or 12. fatham.

Item, hard by Goodwin you shall haue 26. fatham, and the ground is grosse red land.

Item, the west point of the foreland and the Northeast point of Goodwin sands, lye the one off the other southeast and by east, and northwest and by west, and are distant 10. leagues.

Item, the Souther head of the Goodwin and the point at Wonet, lye the one off the other southwest and northeast.

Item from Ledowe to Yarmouth, the course is northy northwest and they are distant 2. leagues, and a southeast or northy northwest Moone makes a full sea at Yarmouth.

Item from Yarmouth to Winterton, the course is northy northwest, and they are distant 2. leagues.

From Winterton to the Spirit is no direct course, but they are distant 9. leagues, & there an east or west Moone makes a full sea.

Item from the Spread to Humber, the course is Northwest, and they are distant three hemings, & a west southwest moone in Humber makes a full sea.

Item, from the Spirites to Flamborough head, y course is Northwest, and they are distant 30. leagues.

Item, from Humber to Flamborough head the course is North and by west, and they are distant 12. leagues.

Item, from Flamborough head to Whitby, the course is northwest and by west and they are distant 18. leagues.

Item from Scarborough to Whitby, the course is northy west, and they are distant 5. leagues.

And betweene Scarborowe and Whitby, lyeth Robin Hoods Bay, and a Southwest or a northeast moone makes a full sea there.

Item from Whitby to Hartlepoole the course is west northwest, and they are distant eight leagues.

Item, from Hartlepoole to Tinmouth, the course is northy northwest, & they are distant nine leagues, & a southwest

west or northwest Moone makes a full sea there.

Item, all alongst the North Coast of England, the flood comes in from by north.

Item from Robin Hoods Bay to Tinmouth or Newcastle, the course is northwest.

Item from the Naze of Norwaye to Skentnesse, the course is Southeast and Northwest, and they are distant five kennings. And to know Skentnesse it is a plaine low land, and to the eastward of Skentnesse, there goeth in a deepe sound towards Bergben. And on the east side of the same sound, lies a high round rocke or Cliffe bare abous water.

A note how you shall know Skentnesse.

SKentnesse is a plaine low land, and to the the eastward of it dooth a sound runne into Bergben. And to the eastward of the said sound, lies a high round rocke or Cliffe, & is called the Bocke. And foure leagues to the southward of the same sound, lyes another round rocke or Cliffe in the sea, & is called the west stone, and between the west stone & the sound lies a little low land which is called the Whitkings eye, and to the westward of Skentnesse 4. leagues in the sea lyes a little land which is called Whittkerken, and shewes as it were two little hilles, but it is not high.

Item, Skentnesse and Olderssound lye one from an other, north northwest, and South Southeast, and are distant seaven kennings.

Item nine Leagues to the northward of Skentnesse lies a high round Cliffe which is called Ricke, and to the Southward of it, dooth goe in the Bommell a little by north the Saltfoorde, and to the southward of the Saltfoord it is all lowe land, and to the northward is high land.

Item betweene Skentnesse and Olderssound, beeing a prettie way from the land, if you looke on it, It seemes as it were all broken land on the south side, and there are ma-

ny

ny sounds that goe in betweene Skeuthielle & Olderſound.

Item to knowe Olderſound, there is a high cliffe y lyes alone, and when you are a good way off to the northwards, it shewes like a saile to the southwards of you, and seeing it from the westward, it is roane.

And from Olderſounde to Kin it is foure leagues, & they lie north & south: and betweene those two is a hauen but you must eyther goe into Olderſound, or into Kinſound, and a seaboord Kinſound a good way from the land, are many high rockes, And to knowe Kin, there is a round brie rocke at the southwest end of Kinſound, that standes vp forked, like a Bishops mitre and lies all alone.

Item from Kinſound to Olderſounde is three Leagues, and they lie north and south, and betweene those two lies a high round sharpe Rocke, and there is no hauen betweene them.

Item, from Olderſound to Stade is eight leagues, and they lie northeast, and south west.

Item you shall vnderstand, that betweene Olderſound and Stade, is a high land, and there you may saile all alongst by the shore, there are no but rockes, whereby you may take any hurt, for they are all in sight. And there is a good haven in Olderſound, and by Kinſound is likewise a good hauen which is called Kilwatch.

Item from Stade to Flouro, or Verie, is foure leagues and they lie east northeast, and west southwest, and is all broken Cliffes betwixt.

Item, from Stade to Flo Godsche sound, the course is northeast, and S.W. & they are eight & 7. leag. & Flo watch is a round Cliffe and lies alone, and the East end to looke vpon, seemes a little lower then the west end, and comming in from the southwards, or by the southwest end, there goeth in Flo, and it is a good haven: & by west off that you shall goe into Oslie, and that lies in east and West, and is a verie good hauen, and betweene Stade, and Godsmanne, lyes a little Iland which is called the Swin, and is cleane

ground

ground to sayle about.

Now for to knowe Giske, it is a lowe plaine land, and there is church with a church yard on the land, and before it lies a blacke rocke, and two or three sonken rockes, whereon the sea doth commonly breake.

Item, when as you are three or foure leagues West in the sea of Giske, then doth that land lie alongst northwest and southeast, almost three score and seaven leagues, and then more easterly.

Now sayling from Giske, you shall not of long come to any other land, but an Iland called Grip, then when you are thwart of Stames Nest, which lies on the maine land, for Grip lies a kenning off into the sea, and to the Southward of Grip is the best going in. And your course from Hellen is all easterlye, and then you shall see a high land, lying before you, that is called Lofter Nesse. And when you come by the east land run all Northeast in, so long till you haue a streame or a tide that meetes you, and you haue haueus on both sides of the land.

The course to be kept in sayling on the Coast of Norway.

NOw hee that will saile in at the easter straite or entrie by the Naze of Norway, then let him with an east winde saile in hard by ẏ Naze, & let him take heede of ẏ rock called the Bishophode, for that lies in the middest of the entrie, and lies aboue water. And when you shall bee within that sound where you shall ride in, there lyeth a boms within the head of that land: anker behinde that where you will.

And if it be so, that you will goe in at the Easter straight, or entrie, then you shall beare in by Waren, and when you are a little within, there standes a little Warder which is a Beacon or marke before the entrie, which you may see thorowe the middest, and take heede of that shelf, and then goe on so in, and let fall your ancker.

Item,

Item, if you will saile in at the Scarsound, you shall knowe that land by the Cow and her Calfe, which is a wooden land, and there lyes a rocke without which is called Wels, and there is an other which is called Sparnay, and then when you come further inwardes as far as the Hart, then you may saile betweene the two Beames or marks, or else through betweene the other shore and the two markes.

Item, if you will saile into Yesnesse, then keep you neere to the west shore, there lies a rocke which is called the Cognaile, take good heed of that. And also there lyes yet an other which is called the Gray Hollome, you must leave that on your starboord side: there are two Beacons set up, and when you have brought those two in one, then are you euen thwart the Cognaile: and then as you come inwards, there lyes a Bome, which is a marke to take hed by, on the Larboord side: You shall knowe that land, by that it is a high land, and to the eastwards lyes the Drommelles, and you may well see the Church of Wardowe, and if the weather be such that you cannot fetch Wardowe, then you shal runne three leagues further into an other hauen, which is called Longe, there lyes a round dyke rocke before it, and there stands as it were a Beacon with a Barrell on it, keep well on that shore where the Barrell stands, and at the entring in on the starboord side, there is a hand which poynts you to holde off from that place: and also there is a Baye or Bome, which lyes in two fatham and ½. you must take heed of that place.

Item, if it were so that you would sayle into Calfesound, then you shall hale in by a high lande which is called Wlinge, and there stands fiue Warlockes or Bemes upon it, the middlemost is the highest, and is on the north shore, and if you come out of the Sound, you shall knowe that land by the Diftill, and those are all out-rockes, and there where the fiue Warlocks or Beacons are upon the shore where the middlemost is the highest, there you must keepe something off from Diftill, for it is not all cleere, and keepe

on

ons North, or rather to the westwardes, then to the east wardes there abouts, for that there is cleare of Rockes, and look that you run not vpon the Rockes which lie aboue water, behinde which you shall ride.

The courses and distances alongst the coast of Norway.

Item, wederow and the Scaw doe lie the one of the other north and by west, and south and by east, and are distant thirteene leagues.

Item, from the Naze to Scarsound, the course is east, northeast, and they are distant foure leagues.

Item, from Scarsound to Flecozie, the course is east northeast and they are distant 5. leagues.

Item from Flecozie to Reeperwicke, the course is East northeast and they are distant two leagues and a halfe.

Item from Reeperwicke to Wardowe: the course is northeast, and they are distant 8. leagues.

Item from Wardow to Longsound, the course is north northeast, and they are distant 8 leagues.

Item from Longsound to Werdzro, the course is North east, and they are distant 11. leagues.

Item, from the Naze of Norway to Winesound it is a league, and Winesound lyes in Northwest.

Item from Winesound to Scarsound or Westersound, the course is northeast, and they are distant a league.

Item, from Scar sound, to Hellicksounde it is foure leagues.

Item, from Hellicksound to Flecozie is a league, and then fourth two leagues to Woolfsound.

Item, from Woolfsound to Blindsound, it is a league, and to Hesines three leagues.

Item, from Hesines to Wardowe, and to Ottersound, three leagues.

Item from Ottersound to Jotterland, 3. leagues.

Item, from Jotterland to Longsound it is a league, and likewise to Larwicke three leagues.

Item, from Larwicke to saint Uært, a league.

Item, from Dalt Vaert to Wiles water, three leagues.

Item, from Wiles Water to Verdero, three leagues.

Item from Verdero to Rost foure leagues, & from thence to Jacksound foure leagues.

Item, from Jacksound to Otturen a league, and Norder Wickholme a league.

Item, from Norder Wickholme to sonder Wickholm foure leagues.

Item, from the Wast to Busher two leagues, and so forth to Halesound a league.

Item from Halesound to Kirkesound a league, and then forth to Halstrand three Leagues, & then forth to Calfe sound foure Leagues, and there men goe into Roy, and so forth.

From Calfe sound to Rettestand three leagues, & there they saile into Oxlands.

Item from Rettestand to Westersound, beinde 9 ing foure leagues. From thence to Weesbergen it is three leagues. And from thence to the Col, fifteene leagues.

The going in by the Westergate, or entrye of Flecory.

Item the wester gate or Wester entrye of Flecory dooth lie in North northeast, & the easter gate or entrie lies west northwest in. And you must leave the Iland, with al the great rocks on ỳ larboord side, & keep within the white Holm, & leave the little black rocks on the larboord side, and there you shall have eighteen fatham deepe, and before the easter gate entrie, you may see the Fore.

Item a league to the Westwardes of the Yelnes there lies Yamersound, where are gray outrocks.

Item, halfe a league to the Eastwards of Yamersound lyes

lyes Kerkfort, and there stands two Beacons or warlocks vpon the blacke rockes, and the one standes on the Starbord side, and the other on the Larbord side. And first goe in northwards, and then after more easterly, and anker in thirteene fatham: and towardes the west shore in the faire way, lyes a blinde rocke, which hath foure fatham at a full sea vpon it.

Item, halfe a league to the eastward of Kerkfort, lyes Hesnes, and if you will goe in there, then keep a good breedth off from the west shore, for there lyes a Rocke before it at the entrye, which is called the Cognaile, and there is another rocke called Gray Holleme: you shall leaue those on the Starbord side, and there standes two Pales set vp vpon it, and when you haue brought these two Pales in one, then are you thwart of the Cognaile. And as you come inwards, there lyes a drye rocke on the Larbord side. And you shall knowe that land, by that it is a high land and the Drommelles are from you, north north-west, and to the westwards are gray rockes: and to the eastwards are round rocks: and hard by the sea side there stands a white church, which you cannot see vnlesse you be hard by it.

Item, when the Dromelles lye northwest of you, then are you open of Hardoid, and the east end of the vttermost Painholme and that Iland, lyeth north and by west, and south and by east, and you must lye northwest in, if you wil goe cleere of them.

A league to the eastwards of Hardoid lyes Ossenfort, and a league to the eastwards of Ossenfort lyes Fuert: and when the Dromelles lye west from you, there lyeth Longe, and before it lyes a round rocke, and there stands a Beacon or marke vpon it with a Barrell, keepe you nere by the land whereon the Barrell stands. And there stands a hand to the Starbord side of the entrye, and that hand poynted, that there lyes a blinde rocke, on which is but eleuen foote water.

Item, the west Stanfort, and the easter Risen, lye three leagues

leagues to the Westwards of Jofferland, and one of them goeth North in, and the other goeth West in.

Item, a little to the Westwards of Jofferland lyes the Hill.

Item, hee that will sayle into the Hill, let him keepe the high hill that lies next vnto Jofferland, alongs within the land to the west of Jofferland, and when you haue the Hill Northwest and by west from you, then you are open before the Hill. And vpon the West shore stands a Beacon, and it is a white point.

Item, betweene Jofferland and Langsound, both lie Abilsnert, by great steepe rough rocks.

Hee that will sayle into Langsound, hee must goe North Northeast in, from the outer out Scarre of Jofferland, and those great out Rockes of the Nesse, and then North northwest goeth with the high rough round Rocke, where the barres lyes before, so al is north north west in.

From Herdzo to Soenwater, the course is north and by west, and thence to Roge North north east, and if you will ancker by Roge by east, it is a thick sandy Bay. And you may likewise sayle through betweene Roge and the Calfe. And if you will ancker vnder Fletto, then goe without the two small Rockes.

Item the course from Herdzo to Elfsange is Northeast and by north, and that goeth within the out Rockes, which lie within the Sikkers a starboord Roge, and keeping so right against the land you shall see a great gray Rocke, leaue that on your Larboord side, and there within lye small Rockes, leaue those on the Starboord side, & goe about by the west shore, then are you right in the narrowest of the gate or entrie, and there is good ground to ancker in, & within it is flat and soft ground.

Item from Herdzo to the Graswicke within the Sikkers, the course is northeast, and leaue the sharpe point on your Larboord side, there is good ancketing, and within lyes a round Rocke, you may goe on eyther side of it, and to

the northwards of that rocke, standes a great warlocke, & there is likewise good anckering. and wome for a great fleete of ships, which tarrie for a winde, and if you will goe in, then goe alongst by the west shore, and there within lyes likewise a round rock, leave that on your sterebord side, and there you may ride if you will, and the first of the entrie lyes in northwards. and after about the Iland north northeast, and then north north west in and about the west shore.

Item, a good way without the Skiers lyes a shippell which is likewise a good hard haven.

Item, Malstrand lieth from the sea we East northeast, if you will saile in there, you shall see a great long hill, keepe that same hill to the east northeast from you, and so you shall leave the Pater Nosters on the Larboord side, and then you may see Malstrand lying before you where vpon the great Beacon or Warlocke is standing.

Item eight leagues to the eastwardes of Malstrand lies Winne, which is a long Rock, and is small to be knowne, for there lies at the end of it small Rocks, like as they were in three partes, and that lies east and west from the seawe.

Item, three leagues by east of Winne, lyes Ronsbacke and Malesound, and Nidinck, lying the one of the other Northeast and south west, and Malesound is a round Iland, and you may saile round about it at fiue, sixe, seaurn or eight fatham. And west northwest from Malesound lyes a sonken rocke a small base shot from it: and then as farre from that lies another little Rocke in sight aboue water, and there standes a Warder or marke vppon it at the west northwest end. And further vpon the maine land standes two warders or markes, those are great ones, and stand vpon the sea side, either of them vppon an out rocke a little a sunder, and there goeth in a little hauen betweene the warders: the same hauen lies east northeast from Malesound and alongst by the lowe point, you shall see Ronsback lying

north

northwards from you, and there it is verie shallowe, & you may wel passe through betweene Kidincke and the maine land, it is all faire ground there, and something shallowe.

Item, the Naze of Norway lies from the Scawe west and they are distant 32. leagues.

Item, Merdero lies from the scaw, North northwest and they are distant 13. leagues.

Item, Walestrand lies from the Scaw East northeast, and they are distant 13. leagues.

Kidincke lyes from Watersbergen southeast and they are distant fiue leagues.

Item Watersbergen lyes from the Cole south & by east, and they are distant twelue leagues.

Item, Watersbergen sheweth as though it were an out rocke, and the land to the eastwards from Watersbergen is all plaine whole land, and Westwards it is altogether rockie.

Item Wzeto is a high round hill, and lyes by Walestrand and westwards from Wzeto lies a long high hill.

Item, when as Wzeto lies East northeast of you, then are you right before Walestrand.

Item, Kidincke is a lowe plaine out Rocke, and lies a league from the shore, and you may saile round about it.

Item, the Scawe Riffe and the Arendelles, lie the one from the other southeast and Northwest, and are distant 9. leagues.

Item, the Arendelles and Anold Riffe lye the one from the other southeast & by south, & Northwest and by North and are distant 11. leagues,

Item Anold Riffe and the Cole, lye one from the other, next hand southeast and northwest, and are distant twelue leagues.

Item the Arendelles lyes Northeast, something northerly from the Wend of Lesolue, about three smal leagues from the shore, and lies alongst into the sea, hard by the Arendelles: it is foure fatham deep, and on the Arendels it

it is but a fatham and a halfe, and within them it is fiue fatham deepe or there abouts.

Item the Scawe Riffe and the Texendelles, lye the one from the other southeast and northwest, and are distant 9 leagues.

Item, the Scawe and Waterbergen, lye one off an other East Southeast, and West northwest, and they are distant 16. leagues.

Item, when the Scaw beareth west and by south from you, and that you are a great league & more from the land, there you shall haue 37. fatham, come no neare to the scaw in the night, then 13. or 14. fathom, and especially when you are come from the westwards.

Item when you are south south west from the point of the Scawe, and that you are a great leagues from it, you shall haue ground there at 38. fatham.

Item, when you haue the Scawe Northwest, or thereabouts from you, and you are a league from the shore, then you shall haue 17 or 18. fatham.

Item betweene Anold and Waesbergen, it is in the channell 22. fatham deepe.

Item from Lesold to Waesberghen, the course is East, and when you are east from Lesold so farre as you can well see it off the Ships Hatches, then shall you haue no ground in 40. fatham.

Item betweene the Scawe and Lesolde it is twentye fatham deepe and soft ground, euen hard to the Coast of Norway.

Item betweene the Scaw and Lesolde is no hard ground, but that you haue about Yetland side, and that is hard sandy ground, and betweene Lesolde and Anold it is al hard ground.

Item, by Waesbergen lyes a Flat of seauenteene Fatham deepe.

Item from Flakenbowe lyes a Flat of twelue fatham deepe alongst to Brunt Yol land.

Item

Item, there lieth a litle betweene Anold and Cole of seauen fatham, and somwhat the streame runnes rounde about and breaked vpon it.

Betweene Anold and Zeland lyes an Iland, which you may saile rounde about, and ride on any side of it, and the same lies hard by Zeland, & there lies out a riffe from it towardes Zeland, and towardes Zeland it is hard, and towardes Nordwing soft, and also there lies another riffe off it towards the Belt, and those banks are very steep too, and the Iland is called [illegible]

Item, Northeast and by north, of the northwest ende of the Cole, lies an Iland called Vlfedsig, hee that will ride within that Iland, let him ancker against the white church at 7. fatham or there abouts. If that here a flat soft ground, you may saile rounde about it, Northwardes or southwardes whether you will.

From Anold to Vlfarbergen, the course is Northwest and they are distant 9. leagues.

Item, when Anold is south southwest from you, there is the north ende deepe, and you may saile to the westward of the riffe 18 fatham all alongst to the sound. And if you come out of the sound with a smart winde, that you can not keepe your course, or neere the land, then ye may ride vnder Anold.

Betweene Anold and Lesold is 7. fatham deep, and you may saile through that water into the Belt.

Vnder the North end of Anold you may ride at 10. or 12 fatham, and you must goe rounde of the riffe, for to goe further in.

He that will saile into Vlfarbergen, let him bring the vttermost Buy to the Northwards of the Castle, and so go off northnorthest, and take good heed, for there lies a great Rocke, euen a little vnder the water, and you must leaue that on your starreboorde side, and run so in, till you come against the Castell, and come thereto an anker at foure fatham or there abouts.

Item, Resolo lyes alongst south and north, and on the south ende stands a long flat Church, and there lieth a rifle of a good halfe League, and you must sayle without that rifle in five or six fatham, for it is shallow: beare Eastward off. And when you are out of the sound, you maye then boldly sayle on, and then you must beare out Eastward againe at five fatham, untill you have brought the south end to the west ward of you, and then you shall have there 7. fatham.

Item North and by east from Resolo lyes an Flande which is called Mulelound: you may sayle within that yland, for behind it lies a good haven, which is called Monsterlond, and lyes North and by north and by east in. And to the west northwest wards, lyes a rocke about two or three bowlwotes off. And there stands a warden or Beacon upon it, and you may saile round about these two Flandes before named.

Item, about 12. leagues south west from the Naze, lyes a banke of 14 fatham deepe, and the ground is grosse red sand.

The course from the Swine Eastward.

ITem note that Walgheren and the Frith mouth, lye the one from the other, south and north, and are distant a hundred thirtie and eight leagues.

Item Walgheren and the Naze, lye the one from the other south and by west, and North and by east, and are distant 70 leagues.

Item the Naze and Wozmeriffe lye one from the other south and North, and are distant 57 leagues.

Item the Naze and the Frith lie the one from the other east northeast, and west southwest distant 108 leagues.

Item the Naze and the sands before Yarmouth lye the one

one from the other north northeast, and south southwest and are distant 102. leagues.

Item the Naze & the Helmes, lyeth one from the other Southeast and by south, and northwest and by north, and are distant 18. or 19. leagues.

Gottgeland lyes from Skagheren northeast, a litle northerly and they are distant 16. leagues.

Holland lyes alongst north northeast, and south southwest, and he that will saple from Gottgeland without the Hacken, he must go north and by east, and it is from Gottgeland to Hacken 18. leagues.

Item, when a man comming out of the Sea doth fall with holland so as he may se the lande, he shall know it by two steeples which stand both in one Churche which is called S. Adverts, and comming by land to borough by that lande right before you, but keep your selfe as you may get off againe with a small wynde, for that shore is flat farre of from the land.

From the Hacken to Wyssenby, the course is northeast, and they are distant 72. leagues.

Skangeroge lyes from Wyssenby east northeast, and is distant from it 32. leagues.

Holy lande lyes from Skangeroge North and by east, and they are 9. leagues.

Item, the riffe lyes west ward into the Sea from Holland, and if ye bee in 20. Fathom of the riffe, then are you

to the southwards of Flye 10 leagues off.

Bouenbergen lyes from Holy land North and by west, and is distant from it 71 leagues.

From Bouenbergen to the Holmes, the course is northeast, and the distance ten leagues.

Bouenbergen is a long flat hill, and on the southende of it stands a steeple, and to the northwards at the north end stands likewise a high steeple, and at all high rough sandhilles alongst towards the Holmes, what those lies northnortheast alongst.

The riffe or sand lyes out between Bouenbergen and the Holmes west into the sea.

Item, from the Holmes to Robsant, the course is northeast, and they are distant 8 leagues.

Item, at the west end of Robsant, lies a bank of 18 or 13 fatham deep, which lies 2 leagues from the shore.

Item, your course from Harts Halse to the Scaw, is east northeast, and they are distant 8 leagues.

Item, Trendell and Scaw rifle, lye one from an other southeast and northwest, and are distant 8 leagues.

Item, from Robsant, is some 8 leagues to Harts Halse, and Harts Halse lies of it northeast and by east.

From Harts Halse to the Scaw is 8 leagues.

Item, the Scaw is a low sandy Land, and Lacklie is a high land, and when you come from by west, you may see it over the Scaw.

Item, the Scaw riffe lyes east northeast into the sea, a great halfe league.

Item, a great league to the northeast without from the west end of Lesold, lyes the grounds or flats of the Trendelles, and in some places they are not above a fatham and a halfe deepe.

Item, when you haue Lesold west from you, and that you may see it out of the waste of the ship, you shal haue no ground at 40. fatham.

Lesold is a plaine low Iland, and Anold is a raggard or knotty

knottie Iland, and the [illegible] great towe off

The Cole is a high land, and the wes it falle in three knobs.

How to faile from sundrie places

Item, if that [illegible] northwards of Callis and will faile in [illegible] go South northeast, something more [illegible] in the mouth Fatham of the Rine, which [illegible] and the course is north [illegible] to Holme, and then north and northeast to the Scaw.

From the [illegible] and by east, and distant 8. leagues, [illegible] Trendelles.

From [illegible] leagues.

From Anold [illegible] leagues.

Item, when you [illegible] the northeast of you, there it is 15. Fatham deepe, at three leagues about. And between [illegible] Fatham deepe, and [illegible] Zeland then twelue fatham. And betweene Anold Kirk, and the Cole, there [illegible]

Item, the [illegible] and when you will faile into the sound, then keep the east [illegible] of Ellenure towe [illegible] and then you can lacke no pactne there.

Ruysand lies something to the northward of Ellenure, on the west side of the [illegible] fatham, and you may ryde in [illegible]

Item the Cole and Ellenure lye fiue leagues asunder, and the course lyes from Wraker, to Fasterbone Rifte south.

From Ellenure to Merichol, the course is south and by east,

eaſt, and they are diſtant 2 leagues.

From Walker to Falkeburne ſelfe, the courſe is ſouth and by weſt. And when you can not ſee betweene the Caſtell of Falkerborne and the church, then are you vpon the ſhaltoweſt of the ſelfe.

Item, Falkerborne and the Downes lye the one off the other, ſouth and by weſt, and noꝛth and by eaſt.

Item, betweene the Downes and Falkerborne, it is in the channell 16. fathom deepe or thereabouts.

Item, betweene Foulney and Falkerborne are ſixe fatham deepe in the channell, but by Falkerborne it is ſhaloly, and by Foulney it is fourteene fatham deepe.

Item, the Stones and Foulney lye the one from the other ſouthweſt and by weſt, and noꝛth and by noꝛth, and they are diſtant 3. great leagues.

Item, Falkerborne and Foulney lye one from another ſouth eaſt and noꝛth weſt, and are diſtant 16 leagues.

Item, Jaſmount and Whitmount lye one of another eaſt ſouthweſt and noꝛth noꝛthweſt, and are diſtant 3 great leagues.

Item, Whitmount and Wyonthollow lyeth off another ſouth and by weſt, and noꝛth and by eaſt, and are diſtant 4 leagues.

Item Jaſmount and the Downes lye one from another ſouthweſt and by eaſt, and noꝛtheaſt and by weſt, and are diſtant 9 leagues.

Item, Whitmount and Wyonthollow lye one from another, ſouthweſt and byweſt, and noꝛtheaſt, and by eaſt, and are diſtant 9 leagues.

Item, Wyonthollow and Blackſtone lye one of another eaſt and by noꝛth, and Weſt and by ſouth, and are diſtant 9. leagues.

The

The course to Middelburgh.

Item, the course from Flesshoone to Jasmount lyes southeast, and they are distant 18. leagues.

Item from Jasmount to Peert, the course is south south-east, and the distance is 3. great leagues.

Item, from the Peert too the newe Dype, the course is south and westerly, and the distance is 3. leagues.

Item, he that will ride by Whitmount, he may sayle into the Wicke as farre as he will, for it is there all faire ground: when as you are a long league from the shore, in 14 or 15. Fatham, there is all good full ground, and there you are defended from a Northwest, or North Northwest winde, but at 7. 8. or 9. fatham towards the land it is all foule stony ground.

Item, if you be ancker at 7. fatham very nere to it, it is stony ground, but if you be ancker at 9. fatham, there it is good for ankerground.

The courses through the mars or grounds which are in the sounde.

First, for the coasts hauing the grounds or flats, from Flesshoone turne to Wastes, you must sayle North & by east, and hard by Walchor it is 5. fatham deepe, and a little off there abouts is the shelfe of that deepe, and there lyes the second Lunne or Bay. Halperlinge lyes in 6. Fatham or thereabouts, & hard by it, it is 7. or 8. fatham deepe.

Now, the Flakes for too bring the Castell at Copenpen hauen, and the sharpe steeple in one, go directly North and by west to the middle Lunne or Bay according as the winde or weather serue, but haue well the ore and on vnder the Colholme. The middle marke is the Southerlest Mill by South Copen hauen.

Then sooth to the third Lunne or Baye, the course is North northwest and there lies a high hillocke, by West of

of other three hillockes, the bearing thereof by North the towne, next to Copen hauen, where you shall haue ten or eleuen fathom. And then going South, North and by east to Elsenure, there you shall haue fresh water as soone as you are past the buy, [illegible]

The course from Elsenure to Draker.

THe right course from Elsenure, to the ground at the entrance Copen hauen and Draker is South and by east, & the distance is 8. leagues.

Then South from Draker to Streeuen, the course is South & by east, the distance fiue leagues. And betweene Streeuen and Elsenure it is 10 or 11. fathom deep, and by Streeuen you haue deep water.

Item, the Sconnes and Stockholm lye Northeast and by south, and Northeast and by north, distant foure leagues.

Item, in the channell betweene the Sconnes & Kastenhowit is 15. 02. 16. fathom deep.

Item, the Sconnes and Stockholm lye one of another, southeast and by east, and northwest and by west, and are distant nine leagues.

Item, Falmount and Stockholm lye one off an other east southeast, and west northwest, and are distant three leagues.

Item Whitmount and Warcentios lye one from an other southwest and by west, and northeast and by east, and are distant 4. leagues.

Item, Whitmount and Wyntholkem, lye the one from the other northeast and byeast, and southwest and bywest, and are distant 12 leagues.

Now

The course from Fasterborne to Dinske.

Fyrst, from Fasterborne to Bzont Hollom the course is East and by south, and they are distant 21. leagues, and Bzont Hollom lies alongst east southeast.

Item your course from Bzont Hollom to Recoll, is east and by nozth, and they distant 24. leagues.

Item, the course from the Recoll to the Rose head, is east noztheast, and they are distant 6 leagues.

Item, from the Rose-heads to Etternes, the course is east southeast, and they are distant foure leagues.

Item, from Etternes to Hemnozd, the course is southeast and they are distant one league.

Item from the Hemnozd to the Hoele is south southeast & they are distant one league.

Item the course from the Hoele to the Willell, is south and by west, and they are distant fine leagues.

Item, from the Hauen of Dansk to the Hewell, the land lies alongst nozth east, and south southwest.

Item Lobsted is a Castle, and standes vpon a high hill, and lies three leagues to the eastwards of Quinsbozowe & there is likewise a Hill by it.

Item the land of Lobsted dooth lie along to Dermemble nozth noztheast, and south southwest, and they are distant the one from the other 25. leagues.

Item from Dermemble to Seuenbergen, the land lyes nozth nozth west, and south southeast, & they are distant twelue leagues.

Item, from Seuenbergen to Leseroyt, the land lieth nozth and by east, and south and by west, and they are distant 11. leagues.

Item, Dermemble and Leseroyt, are distant twentie-two leagues.

The

The courses and distances alongst the coast of Pomerland.

IN primis, fro the Rose head to Swenskis head, it is fowre leagues, & from thence to Wisingsarke other 4 leagues, and then so Lida a league, and at Lida is but fiue foote water.

And then from Lida to the Recoll, you haue 7. leagues and from Recoll to Granshood fowre leagues, and then forwards is a deepe bay into Jasmount.

Item, from Granshood to Swinde, is three leagues, and there comes out a small River which is called Wiper.

Item, from Rinnold to Colbergen is 9. Leagues, and there comes likewise a small riuer out.

Item, Colbergen and Jasmount lye East and west, the one from the other, and are distant 19 leagues.

Item, the course betweene Jasmount and Granshood is east northeast and west south west.

Item, the coast of Pomerland lyes alongst west South-west, and east northeast.

The courses to saile to Revell.

ITem from Folkerborne Riffe, to goe by the North side of Bornthollome the course is east, and to the Northwards and are distant 20. leagues.

Item, from Bornthollome to goe to the southwardes of the Goteland, the course is northeast, and they are distant 47. leagues.

Item from Nolwrough in Goteland, to Easter Gore, the course is Northeast and something to the Northwards and they are distant 14. leagues.

Item, from Easter Gore to Wageroit the course is northeast northerlye, and they are distant 37. leagues, then from Wageroit to Hipiernes it is 7. leagues northeast & by east.

But

But take deepe of Dipernes. And then your course from Dipernes to Wodhollome, is likewise northeast ¢ by east and they are distant 9 leagues.

Item, Wodhollome is a little lowe Iland, and lyes two leagues from the maine land.

Item. from Wodhollom to Roge the course is east northeast, and rather more easterly, & they are distant 6 leagues.

Item from Roge to Nargen, the course is east northeast rather to the eastwards, and they are distant fire leagues, and you must haue Nargen on your starboord side.

Item, from Narsen to the Waye, you must goe east a great league, and you shall haue Waye on your starboord side.

Item, you must goe from the Waye to Reuell south, and something to the eastwards, and they are three leagues distant.

How Dageroot is knowne.

The best knowledge is this: the gouernors of reuel haue made a high Tower or steeple upon Dageroot without any church to it.

Item Dageroot and Hontsort lye the one from the other south southeast, and north northwest, and are distant eight leagues.

Item, between Dageroot and Hontsort is a great gulfe or bay, and the same is called Hondeswicke.

The courses from Dageroot to Derwinda.

The course from Dageroot to Derwinda, is north and by west, and south and by east, and they are distant 14. leagues.

Item, from Derwinda to Seuenberghen, the land lies alongst south by and by west, and north and by east, and they are distant 32. leagues.

The

The course from the Rose-head to Derwinda.

DErwinda is a Castle, and there are three small Towers vppon it, one standes in the middle of the Castle and that is the highest, and the Castle standes in Coreland.

Item the course from the Rose-head to Derwinda, is Northeast and by north, and they are distant thyrescore and three leagues.

The thwart courses from Coreland to Goteland.

FIrst Derwinda and Castergore lye one from another East and West, and they are distant eight and twentie leagues.

Item, Derwinda and Yotelsough which is the southwest end of Goteland, lye one from an other East northeast, and West Southwest, and they are distant 44. leagues.

Item, the southwest end of Goteland and the Yeele, lye one from another South and North, and are distant nine and fortie leagues.

The course from the Rose-head to Quinsbrow.

THe course from the Rose-head to Quinsbrowe, is east and by south, and they are distant 18. leagues.

Item the Yeele and the Mainell of Danske, lye the one from the other South and by west, and North and by East and are distant 5. leagues.

How

The course from Bromholme to Rie.

ITem the course from Bromholme to Derwinde is Northeast and by east, and they are distant 77. leagues.

Leferort. Derwinde. Bacouen.

Item, the course from Derwinde to Leferort is Northeast and by north, and they are distant 4. leagues.

Leferort.

[redacted]

Item, the course from Leferort to Domesnes, is East northeast, and the distance 15. leagues.

Item and if you doe not sound, it is dangerous on Cotland side, therfore you must goe ½ way by your lead. And take good heede of Dessell side, for that is stony ground.

Item, you may boord in by Leferort in 4. or 6. fatham without danger, and the ground is red sand, and when you come to 13. or 14. fatham, then goe northeast ½ by east with Domesnes.

Item, the course from Domesnes to Rye is southeast, and something more easterly, and the distance 21. leagues.

Item, betweene Cotland and Dessell, it is 15. or 16. fatham deepe. And thwart of the church of Dessell lyes a rifle two leagues off from the shore, and the same rifle is called Swalueroort, you must take heed you come no neerer that rifle then seauen Fatham.

Item betweene Domesnes and Dessell it is 20. fatham and is fast or hard ground.

Item hee that will ride vnder Dessell for a Westerlye winde, let him beare in till he come in seauen Fatham or thereabout, and there hee shall haue good cleane ground and good Anckerholde. And yee shall keepe the Church of

Oesell halfe a league from you, west and by north or thereabouts. And there you shall bee well for a west south west winde. And the point of Oesell by west the church whereon the houses stand, that shall beare west from you. And the Riffe lies thwart off from the church two leagues, south & by west into the sea, and in some places it is nie nigh to the land. Take heede therefore you come no neerer the outside of that riffe then 8. fathom, for it is verie uneven ground and stony. And when you are at anker in the roade at Oesel, then have you the point of Domesnes, southest from you or thereabout, and distant three great leagues.

Also the land along from Derwinda to the Seuenbergen lyeth south and by west, and north and by east, & they are distant 11. leagues.

The thwart course of Domesnes, Rounde, and Oesell.

ITem Domesnes is a Iland, and lieth a great League from the land East Northeast into the sea, from the point.

Item, Domesnes and Rounde lie the one from an other east and by north, and West and by south, and are distant eight leagues.

Item, Round and Amsroke lie the one from the other north west and by west, and southeast and by east, and are distant 8. leagues. And Amsroke is a little Iland, and lies a league from Oesell and the ground about it is foule stony ground.

Also the Round and Rie lye one off another, southeast and northwest, and are distant 16. leagues.

Also Round is an Iland, & is in compasse a great league about, and you may saile round about it without danger, keeping you in five fatham and a halfe.

Also hee that will ride by the northeast point of Round: let him anker against the Chappel in 5. Fath. it is al clean ground

ground there. And on the west southwest side of Round, it is a faire flat land.

Now followeth the course from Round to Farne.

FIrst, from Round to Rin, the course is east northeast, and they are distant 12 leagues.

Also from Rinne to Berkholme, and from thence to Farne, the course is northwest and by north, and the distance eight leagues, and Farne lyes in the Waye of Ryes bottome.

Item, Rin, Berkholme, and Farne, are three Flandes, and these you must leave all on larboord side, when you sayle into Farne, at Farne standes a chapel Steeple.

Also Rin is a low ragged Flande, about two leagues of length, and there is fowle ground about it.

Item, it is broad betweene Coxland and Rinne, fower leagues.

Also Coxland side is a good faire shore, and betweene Coxland and Rinne it is 10. fathom deepe, and betweene Berkholme and Coxland is five fatham deepe, and betweene that and Farne, now and then lesse water: to wit, 4. fatham and three fatham.

Farne and Rye doe lie the one from the other south and by west, and north and by east, and they are distant nine fowre leagues.

Item, the deapth at Farne is one fatham & a quarter.

Nowe you must take heede that by night you come no neerer to Domelnes, then 15. fatham, and hard by the vttermoste parte of the Rifte it is 17. fatham deep, and at the vttermoste partes of Domelnes and Round, it is 24. fatham deepe.

Also Domelnes and round lye the one from the other east and by north, and west and by south, distant eight leagues.

The course betweene from Reuell to Dagerort.

In primis from Dagerort to Bigerwelle, the course is west southwest, and something more southerlye, and they are distant 21. leagues.

Item, the course from Bigerwelle to Dagerort, is south east and by south, and they are distant 6. leagues.

Item, the course from Dagerort to Gatterort, is southwest and they are distant 30. leagues. And Gatterort lies by the south side of Gotland, neere the midst of it, or rather neerest toward the east end. Gotland is a good roade for such as are bound either eastward or Westward, you may saile in all places round about that Iland.

Item, from Gatterort to Wronthollom, your course is southwest, and they are distant 55. leagues.

Item, Westergore lyeth in the South side of Gotland by Westhuy.

The course that is and ought to be kept from Dagerort, to go about the North part of Iutland to Wronthollom.

First the course from Dagerort to Gotlgeland, is south west and by west, and somewhat westerly, & they are distant 25. leagues.

Item, from Gotlgeland to Rarelse your course is south west and by south, and they are distant 28. leagues.

Item, from Rarelse to the south point of Polland your course is south, southwest, and they are distant eight and twentie leagues.

Item, the course from the southermost point of Polland to Wronthollom, is southwest, & something more southerly, and they are distant 19. leagues. And from that south point of Polland, lieth out a Riffe into ẏ sea, a little league from the shore.

Item

Item, it is from Rouelles to Sargben 4. leagues.

Item, from Sargbent to Surpeis 1. league.

Item, from Surpe to Rageis three leagues.

Item, from Rageis to Woodhollom, is 4. great leagues.

Woodhollom is a little lowe Iland, and lies a league and a halfe from the maine land.

Item from Woodhollom to Sipernesse it is 8. leagues.

Sipernesse is a high land, and there lyeth out a Rifte from the land halfe a league into the Sea, and on the east side it is flat, but on the west side it is deepe, and is a sandy ground.

The course from Dageort about by the north side of Goteland.

FRom Dageort to Gotlgeland, the coutte is southwest and by west and they are distant 24. leagues.

Gotlgeland is a little Iland and full of trees, and there is no habitation vpon it, and there you may choose your roade where you will under the land, for it is all cleane ground and faire which lyeth rounde about that Iland. It lyes north northeast from the easternmost point of Goteland which is called Fero, about 4. leagues off.

Item, there lies a Rifte of sand out from that point of Fero, a great league from the land, and the same Rifte is called Saluc Wittrins, and it is all shingle stones, and lies out from the land North and by east into the sea.

Item the point of Fero and Cattergoze doe lye the one from the other south and by west southerly, and north and by east northerly, and are distant 9. leagues.

The deapthes and soundings about Goteland and Yolland.

BEtweene Goteland and Yolland is verie uncertaine sounding, for in some place you shall have 33. fatham and in some other place twenty two fatham, & the ground blacke gritty stones, and sometimes stones as great as pea-

ſon which are blacke and eaſie and ſometime you ſhall haue 19. fatham and all blacke ſtony ground.

And when the ſouther Norden beareth Weſt off from you, and that you are three Leagues or thereabouts from the land, there you ſhall haue hard ground, and 28, or 29 fatham deepe.

Item, when as you are two leagues to the weſtwardes of Caſtergate, and three leagues or thereabouts from the land, you ſhall haue rough ground, and one and thirtie fatham deepe.

Alſo when you are Northweſt, or Northweſt and by north from Holbrough, which is the ſouthweſt point of Gotelande three leagues from the ſhore, you ſhall haue groſſe Gravelye ſand, mingled with ſome blacke ſtones as great as beanes.

Alſo when the Chappell of Wyncher Norden doth lye North Northweſt, or more Northerlye from you a leagne from the ſhore, you ſhall haue there thirtene fatham deepe.

Alſo when you are North Northeaſt, or thereabouts from Holbrough 6 leagues from the land, you ſhal haue fifteene Fatham, and ſtonie ground. And when you are Southweſt of Holbrough, two leagues from the land, you ſhall haue twentie two Fatham, and likewiſe groſſe ſtonie ground.

Item, when Souther Norden beareth Weſt Northweſt from you, and you are two Leagues off in the ſea, you ſhall haue there nine and thirtie fatham, and hard ſtony ground.

Alſo when you are paſt ſouther Norden, and are in the faire way about Clippen, there you ſhall haue hard Oyſter miſh ground, and 39. fatham deepe.

Alſo from Dareiſe to the South end of Yolland, your courſe is ſouth ſouthweſt, and they are diſtant ſeauen and twenty Leagues.

Item, the courſe from the South end of Yolland to

Byrne

Wzonthollom is southwest and by south and they are distant 18. leagues.

Item, Polland is 18. or 19. leagues long, and a great League wzoade, and vppon Polland all the steeples are flat and Pollands south coast lyes alongst North and by east and south and by west.

Item, from the south point of Polland, there lies out a Wzoed stony riffe, which is called Wouther Nozden, and lies out a league from the shoze.

Also by west Polland goeth in Cozmerlound, and that way you may saile to Stokholme, and by east Polland it is foule stony ground.

Also seauen leagues from Polland West southwest, lyes an Iland which is called Clippe, you may saile round about that Iland, and it lyes nozth northeast from Wzonthollom, and is distant 16. leagues.

Item, Wzonthollom and the Iland called Hanno, lye the one from the other, south & by west, & nozth and by east, and they are distant 11. leagues. Hanno is a high round Iland, & you may ride there if you will, and the land lyes from Hanno to Blackstt south southwest.

Also the Castle of Wzonthollome and the Earthollome, lye the one from the other west and by south, and east and by nozth, and are distant 3. leagues.

Item, the Earthollome and the south end of Wzonthollom, doe lie the one from the other South and by east, and nozth & by west, and are distant 3. great leagues. And in the Earthollom there goeth in a little sound, which is foure fatham deepe. This Iland is two great leagues from Wzonthollom.

Item, southwest and by south from Wzonthollom, nine or ten leagues off from the shoze, lyes a Riffe called the Wzowers Riffe, which is a banke, and there is fiue fatham vpon it, and it lies alongst southeast and nozthwest.

Also you may saile round about Wzonthollom without danger, keeping 12. fatham.

A note for riding vnder Goteland.

FIrſt you ſhall vnderſtand that great Karle and little Karle are two ſmall high rockie Ilandes, which doe lye verie neere the one to the other, and they lie to the Northwards of the weſt parte of Goteland hard by it: and for ſuch as are bound weſtwardes, is a good roade vnder little Karle which lyes next vnto Goteland, and all is cleane ground round about. But great Karle is not cleane ground neither on the northweſt ſide, nor ſoutheaſt ſide.

Item, betweene great Karle and little Karle, it is 13. or 14. fatham deepe.

Item, Karleſſe and Wiſbuy lye the one from the other northeaſt and ſouthweſt, and are diſtant 7. leagues.

Item, betweene Karleſſe and Wiſbuye lyes Weſtergoze.

Item take heede you come not any neare great Karle on the other ſide of it, than 11. or 12. fatham.

Item whoſoeuer will ſaile into Eaſtergoze, comming from by weſt, let him paſſe by the firſt point and beare in to the other ſteepe point, and anker there in 7. or 8. fatham there you ſhall haue cleane ground, and betweene the Iland and the Maineland it is 11. fatham deepe, and 16. fatham hard by the land.

Item a little league by weſt Eaſtergoze lyes likewiſe a good hauen and it is called Sandwicke, and there ſtandes a Chappell hard by the ſhoare ſide, and fiue leagues from thence to the weſtwards lies another hauen which is called Herwicke, and is fiue fatham deepe, and ſo likewiſe other more, as Wulfwige, & Herlicholme, and Faralound, and the Iland of Eaſtergoze, and doe lie the one off the other ſouth and by weſt, and north and by eaſt, and are diſtant 9. or 10. leagues.

Item, betweene Volvzough and Eaſtergoze, lyes a bancke of 24. fatham, groſſe red ſtony ſand, and from that

banke

banke you cannot see the land of Gotelande out of the top. And you haue also to the Eastward thereby, an other banke of thirteene or fourteene fatham, and the ground is gray or whitish sand, and when you are ouer that, you shal not haue ground at fortie fatham.

The courses from Earthollom to Derwinda.

ITem the course from Earthollom to Dermemel is east northeast and they are distant 63. leagues.

Item, when the Rosehead beareth southeast from you, and that you are foure leagues from it, you shall haue there twentie fiue fatham, and the ground red stones like the rifle sand.

Item when the Rose-head lies south southeast of you, being a league from it, there you shall finde fourteene or fifteene fatham, and it is white sandy ground.

Item, the Rose-head and Gotelande lye one from an other south and North, and are distant 38 leagues.

Item, if you come from Earthollom being bound for Danske, and haue 30. fatham deepe, you shall scant see the land out of the top, and the land is great white sand.

Item, when the Rose-head beares south southeast from you, then it seemes like a saddle with two Hillocks.

Item, when the Rose-head beareth south southwest of you, and that you are a little league off, there the ground is grosse white sand, and yee shall haue about 30. fatham deepe.

Item, when as the Rose-head beareth West from you, and that you are a small league from the Land, there you shall haue small white sand, and 15. or 16. fatham deepe.

Item when you are betweene the Rose head and the Hoele, and the East of the Hoele, about halfe a league from the land, there you shall finde 33. fatham and a white sandy ground.

And

And before the Weste in the rounde, you shall haue 25. fa-
thom deepe, and blacke sandy ground.

Grounded and Deapthes.

ITem, the bank that is at the easter end, lying northwest from the Rocke, and the wester end of the banke that lyes northwest frō Haerlem, hath a swerhe in the middest of the banke, in which is 12. 14. 16. 17. fatham, and whē you are at the broadest, there is 14. fatham, and then you haue the Flie east southeast from you.

The deapth and ground thwart of Ameland.

FIrst at 20. fatham ye shal haue grosse red sand mingled with some black sand, and shelly. And to the southwards of that in 15. fatham, there you shal haue small sand with shelles. And for the space of the running of 4. or 5. glasses, continually ye shall haue 16. Fatham, and the ground all small sand, and that is the banke or flats of Ameland.

Item, in 24. or 26. fathom North from the Skellings, there you shall haue fine white sand.

Item, vpon the Riffe from three and thirtie fatham to foure and twentie. And from three and twentie to fiue and twentie fatham, the ground is all white sand, and continueth so till the last end of foure and twentie fatham, and twentie Fatham. And from twentie to seauenteen fatham is all grosse stony sand: and that is about Northkum, and where white shelles are mingled withall, and is thwart of the Skellings.

Item, at 18. fatham of the Skellings, the ground is white sand mingled with blacke sand.

Item, the ground thwart of the Flye Iland is white sand, and mingled with some redde sand, and redde shelles.

Item, at 18. fatham by the east end of the Skellinges,

the

the ground is fine white sand mingled with blacke seedes, and small long white thinges like Needles.

Item, about North northeast from the Neas, there lies a sholde of fourteene fatham, and the ground is grosse red sand, there wee lay at drift three houres, or there abouts and it was still to the southwards, and then wee came to foure and twentie fatham, and the ground was grosse stony sand.

Certaine notes set downe by the Author, what his Ship did runne at sundrye times.

ITem, I have sailed from Bronthollom to Gotsland in 18. houres.

And from thence to Derwinde, in seauenteene houres, having a fresh continuall winde, and the Shippe being in her ballast.

Item, Easthollom and the West end of Bronthollom, lye one from another west and by south, and east and by north, and are distant three leagues.

Item, the Castle at Bront hollom and the Blackehouse, lye the one off the other, southeast and northwest.

Item, I have sailed out of the Flee ouer the Riffe in 28 houres, having a mighty and continuing winde, the ship being in her ballast.

Item, I have sailed from Bronthollom to Domesnesse, within 4. houres with a stout gale a foze winde.

Item, I have likewise sailed within ten houres from Bronthollom to Yotland, having a continuall fresh gale of winde.

Item, I have sailed from Bronthollome to Gotelande, within foure and twentie houres, and from Gotelande to Derwinda in seauenteene houres, bearing as much saile as the Ship was able to carrie.

Item, I have sailed out off the south Perdis by Rochel

to

to Bellille in foure and twentie houres, with a reasonable gale of winde.

Item, hauing a verie great gale of winde I haue sailed from the Fourne to the Ile of Waight in 33. houres.

Item, I haue sailed out of the Hoolden to the Scaw in 33. houres hauing a fresh coole of winde, which carried vs well in the running of three glasses two leagues: and I haue sailed to the Mike of Scaghen in 17. houres, and was as much as the ship could beare vp, and this was the third day of July. 1574. with a laden ship.

The same third day of July I sailed on foorth from the Scawe to thwart of the Treydelles in 3. houres.

Item: I haue with a fresh thorough bearing winde sailed from Flushing to Calis in ten houres.

Item I haue sailed from the Hoolden to the Scawe, in three daies carrying as much sale as the Ship was able to beare, and in three daies and three nights to the Nase, which was everie glasse a league.

Item, I haue sailed from Fethurch, out of the Eine to Rochell in fiue daies, & wee were two nights in the north sea, & two nights betweene the Hoolden and the Fourne, and a night betweene the Kepler ryz race and Rochel, with a mightie continuall winde, as much as mast and Tackle were able to beare.

Item, with a fresh thorough bearing winde I haue sailed from easter Denmarke to Bellille in 8. houres.

Item with such a like winde, I haue sailed from Bellille to Vse in 6. houres.

Item I haue sailed hauing a continuall great gale of winde, out of the race of Fountanie to Saint Martins Iland, in twentie foure houres.

Item, I haue sailed from the south Beeretrees to Bellille in foure and twenty houres, with a reasonable gale of winde.

Item with a reasonable bearing gale, I haue sailed from Bellille to Vse in 10 houres.

Alſo with ſuch like weather I haue ſailed from Belliſle to the Loper in 7. houres.

Alſo I haue ſailed from Saint Martins Iland to Vſe, in 7. houres hauing a great coole of winde.

Item, with ſuch a like winde I haue ſailed from Belliſle to Penmarke in 9. houres.

Item, I haue ſailed out of the race of Fountany to Vſe in 22. houres, hauing but a reaſonable gale of winde and faire weather.

Item I haue ſailed from the Fourne thwart of Portland with an eaſie gale of winde in 24. houres.

Alſo I haue with a good reaſonable winde, ſayled from the Needles in the Ile of Wight, to Saint Powles in 28. houres.

Alſo I haue ſailed from the Fourne, to thwart of the Ile of Wight in 33. houres, hauing a continuall freſh gale of winde.

Alſo I haue ſailed from Feachie to Wight in 10. houres and foorth to Portland in 7. houres.

Alſo I haue with a freſh winde ſailed from the Hage to thwart of Wunderk in 18. houres, and foorthwith to the Hoofden in 4. houres.

Alſo I haue ſailed from the Hage to the Hoofden in 23. houres, which was with a mightie gale of winde, as much as maſt and tackle could beare.

And I haue ſailed with a freſh large winde, from Margen to Woodhollome in 9. houres.

Alſo with a like winde I haue ſailed from Margen to Vageroot in 17. houres.

Alſo in the running of 28. glaſſes, I did faile from Vanges riffe to Scaghen.

Alſo I haue with a reaſonable gale of winde ſailed from the Peertrees to Belliſle in 24. houres.

Item, I haue with a reſonable gale of winde ſayled from Vrouthollom to Fotterborne Riffe in 9. houres.

Item I haue ſailed from Elſenore to the Scawe in 20. houres

houres, hauing but a reasonable gale of winde.

Item Wageroit and Huntskait lye the one from the other north northwest, and south southeast, and are distant 8. leagues.

The course through the Belt, & these leagues are to bee counted for Wekerses.

FIrst from the Weamen to Femeren it is 9. leagues and without to goe about to Stabuy it is 10. leagues, and the course is northeast and by north.

Item Stabuy is two leagues in length, and the course is northwest.

Item from Stabuy to Langland it is 7. leagues and the course is west northwest, against the south end of Langland, there lies a shallow within halfe a League of Langland, you may saile betweene them both.

Item Langland is fiue leagues long, and the course is north a little to the eastward.

Item from Langland to Siroe it is 3. long leagues, and the course is northwest and by north.

Item from Siroe to Kins is three leagues, and the course is northwest and by north.

Item from Kins to Sellions is fiue leagues and the course is north and by west.

Item, from Sillions to Siroe is 4. leagues, and the course is north northeast. And directly ouer against Siroe lies an Yland, which is called Wedero, from thence lyeth out a Riffe or bancke, a great halfe league from Siroe, and you may passe through betweene Siroe and the same riffe or banke.

Item, from Siroe to Steuenshot is fiue good leagues, and

and the course is north northwest.

Item from Stenenshot to the Sea Way, it is 10. great leagues, and the course is north and by west.

When you are verie nigh unto the land, you have on Larboord five the grounds of Portland, on which is 4 or 5 fatham, but you may not come any nearer to them. And on your starboord lyes the Riffe of Lesold, you may come within 5. or 6. fathams of that riffe, but in the right channel is 10. or 11.

Item, when as you shall saile off from Stenens, & that you will saile over the Sweetring, toward the Dwaell grounds, the course is north northeast 14 leagues, and then when you are come so farre, that you can see the high land behinde Seabury, then lying that high land which lyeth behinde Seabury, so far northerly of you, that Seabury may beare north northwest, & so shew it selfe cleere without the said high land.

And then saile on north northwest, and you shall have fast ground, and if you have then 8. 9. or 10. Fatham deep, then are you in the right channell.

Item from Seabury to the Scawe is 6. great leagues, and the course is north and by east: and on your Larboord lyes a little Iland which is called the Yelmes, you must take heede of that Iland.

How to saile from the Scawe through the Belt.

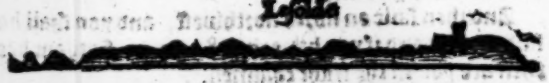
Item, the Riffe stretches out East Northeast from the Scawe, about a great league from the Land, and you may well saile by it in 14. houres.

Item, from the Scawe to the Yelmes, the course is south.

South and by west, and they are distant 4. leagues, and in the right channell is 14. 12 15. fatham, and the moze to the eastwards so alway is the deeper water.

Also from the Haines to Seaburg, the course is south & by west, and they are distant 4. leagues, and against Seaburg there lies the Dwaell grounds alongst by the shoze, and lie about halfe a league off from the land, and you may saile by those Dwael grounde keeping 7. 8. 9. 10. 11. 12. fathō. For in the maine channel is 10. 11. 12. fatham deepe, and is fast ground.

And when the toune of Seaburg bereth west from you, then are you right against the Dwaell grounds, and East and by south from Seaburg, there lyes the Iland of Lesold about three leagues off, and then leaue two third partes of the water to Lesold wardes.



Also there lyeth a Rifte west off from Lesolde, about a league from the land: and when you haue the Church of Lesold east from you, then are you right against the Rifte.

Also when you shall saile through the Dwaell grounde to Steuens Hooke, the course is south southwest, but and if you will leaue Steuens Hooke on your Larboord side, then saile south and by east, and there in the right Channell is fire oz seauen fatham, and soft flat ground which is called Sweetring, and you may boldely come on that side of Steuens Hooke at fiue fatham. But when you are within Steuens Hooke, then you shal haue deeper water, to wit 11. 12. 13. fatham and hard ground. And the further you are off from Steuens Hooke East wards, the deeper water ye shall haue.

Also

Alſo, about 3. leagues to the ſouthwardes of Stenens Hooft lyes a little towne called Drund burg, and alongſt that runs a quick ſand or landwiſe ground, which is called blacke ground, and lies about halfe a league from the land.

Item, the courſe from Stenens Hooft to Siro lies ſouth ſouthealt, and they are diſtant 8. leag. And Helmes (which is a little Iland) lies off from Stenens Hooft about ſouth and by weſt & they are diſtant 4. leagues. And in the right Channell betweens Stenens Hooft and Siro it is 11. 12. & 13. fatham deepe and is hard ground.

And note, that in the right courſe eaſt ſoutheaſt from Helme, lyes a quicke ſand ground, which is called Hattes Riffe, and it is not paſt 4. 5. or 6. fatham vpon it, but when you are paſt that, then thenceforth to Siro, you haue 12 or 13. fatham deepe, and faſt ground.

And this quicke ſand lyes on the eaſt ſide of the faire way, & eaſt ſoutheaſt from this ſhold lies an Iland which is called Hallow, which lies ſo far off that you can but euē ſee it, and you may ſaile through betweene Hallow & Zeland alongſt to the ſound, and about weſt from Siro lyes a little Iland which is called Wedero, and there lieth out a Riffe that ſtretches to within halfe a league of Siro, and you may ſaile through betweene Siro and that Riffe, and you muſt leane two third partes of the way towards the weſt land (that is to ſay, on that ſide ẏ Wedero is in,) and the other third parte of the water on Siroes ſide, but come no neerer then two third parts of the way or more, which leane on Wederoes ſide, to wit, on ẏ weſt ſide, & the Riffe lieth off from Wedero about eaſt, and in the right channel it is 12. or 13. fatham deepe.

Item, the courſe from Siro to Ruffenes, is ſouth ſouthweſt and they are diſtant 4. leagues. And there lies a flat off from Ruffenes, and runs ſouthweſt off a little, halfe a league from the ſhore, and take heede you come no neerer there then 10 fatham.

Item, the courſe from Ruffenes to Roems, is South ſouth-

southeast & they are distant 4. leagu. And there lieth a flat off from Roems, east southeast, about a third parte of a league, you may ride beyinde that for a Northeast winde, and for a Northe northwest winde, but you may not saile about by the westwards of Roems: hard by south of Roems lyes a little towne which is called Tartmune.

Item, from Roems to Diro the course is south southeast & they are distant 4. leag. And from the southend there lieth out a small Riffe northeast off about a quarter of a league, and Neborke lyeth west southwest from Diro, & Neborke lyes in Manevan doe. And there lies a little Iland west southwest from Diro about 3. leagues distant, and is called Urellelles, and there lies a Riffe off, & you must passe through betweene the Riffe of Diro, and the Riffe of Urellelles. And that Riffe lieth northwest and by north from the Urellel, and there lies a shold on the east southeast side of the channell.

When from Diro to Langland, the course is southeast & they are distant 4. leagues. And about west and by south of that, there lies a little Iland, (which is called Dimes,) and about 3. leagues from the North end of Langland to the northwards, & there lies a Riffe northeast from Langland, about a third part of a league off. And Langland is 7. leagues long, and lies alongst south and north. And to the east southeastwards of Langland, lyes an Iland called Laland, and from the south end of Laland, there stretches out a Riffe or banke West Southwestwards about halfe a league from the shore, and to the southeast or east southeastwards, there is a shallow water, as fiue, sixe, or seauen fatham.

Item, from Laland to Femeren the course is east south east, and they are 5. leagues distant.

Item, from thwart off Roborgherhert and Femeren, the course lies west southwest.

Item from Femeren to the Mauen, the course lies south southwest, and they are distant 13. leagues.

Item, for

Item for to knowe the markes of Lalands Rifle. Firſt there ſtandes a high ſteeple on Laland, which ſtandes in the towne of Saltain, when as you haue that ſteeple eaſt & halfe a point to the northwards off you, then ſhall you ſee two little round Hillocks, ſeeming as though it were two Fiſhers boates, when as you haue brought thoſe two Hillokes, and the ſaid ſteeple in one, then you are neere the Rifle of Laland.

The courſe from the Moores to Lubecke.

FIrſt from the Moores to Oheſtro Rifle, the courſe is ſouth ſouthweſt, & they are diſtant two kenings. Oheſtro Rifle is a flat, & is a great leagues from Oheſtro, & Roſtick, and the Rifle lie one off another ſouth and north, and are diſtant 9. leagues.

Item, the courſe from Oheſtro Rifle to the the Craues, is ſouthweſt & they are diſtant 3. kennings. Wiſmond and Roſtocke are diſtant 7. leagues by land.

Roſtocke and Wiſmer are diſtant 8 leagues by land, & Wiſmer and Lubecke are diſtant 8. leagues by land.

Item in the channell ſayling to Lubecke it is 14. 15. or 16. fatham deepe.

How to ſaile into Wiſmer deepe.

TO ſaile in at the deepe of Wiſmer, which goeth in by the eaſt ſide, you muſt haue ỳ ſteeple which ſtandes on the ſouthland to ỳ ſouthwards off you, & ſaile in ſo till you haue brought the ſteeple which ſtands on the Weſt land, neere to the moſte eaſterlye houſe of thoſe fiue or ſixe houſes which ſtand there, and by thoſe houſes ſtandes a tuffe of Trees togeather from the Eaſt land, and there lies out

a small Kirke, that stretches out from the Eastland Northwest and by north, and when you have brought those steeples that stand vpon the Eastland, & those houses in one, then goe out South East and by East in that deep you shall have 14. foote water. And in the Downes there are two tons or Buoyes lying: the one lies on the east of the Kirke, and the other on the shallowe ground, and you may saile through betweene them.

Heere followeth further of Wimmer deepe.

Item, to saile into Wimmer deepe, when you come from by east, then beare South west in with the west shore, till you have brought the sharpe steeple of Wimmer, and the point of the east shore in one. And then hale in southeast and keepe the steeple vnder the land, and there you shall have shallow water off 4. or 5. fatham deepe, and the verie shoalest is but 3. fatham, and when you come at 3. fatham then you shall have the point or corner of the west shore west and by south from you, and after that three Fatham, you shall have againe now and then three Fatham and lesse, but doubt not, but trust to your course, and to the before written marks.

The Flouds and Ebbes from Calis in Andolozia, to Hambrough.

First at Calis Malis a south southwest moone makes a full sea.

Item, at Saint Lucas a Southwest Moone makes a full Sea.

Item, you have the like tide from thence to Lisbone.

Item, all the Coast of Spaine, and Gascoine, Poitowe and Brittaine to Fonteny, it floweth a southwest and northeast Moone.

Item

Item, in the River of Burdeux a southwest and by west moone makes a full sea.

Item, a southwest and by west moone makes a full sea in the race of Fonteny.

At Saint Mathewes a southwest and by west Moone.

At Fourne a West southwest moone makes a high water.

At Aberwracke a west southwest, and an east northeast moone makes a full sea.

Item, in the sea before saint Poules, an east northeast moone makes a full sea, and within the Passen at Roscow a west southwest moone.

Item, two leagues without Vshant an east or West moone makes a full Sea, and the same tide keepes on to Saint Poules.

Item 9. Leagues without saint Poules it floweth west northwest.

Item in the Roade at Garnesey, a west and by south moone makes a high water.

Item from Garnesey to the Raskets it floweth Northwest.

Item 6. or 7. leagues without Garnesey it floweth a northwest and by Northmoone.

Betweene the Raskets and Portland alongst the coast a northwest and by north moone makes a full sea, and seauen or eight leagues off the land, a northw. moone makes a full sea.

Item, at Sillie, an east or west moone, and in Falmouth an east and by north moone makes a full sea, and without in the sea an east and by south moone.

In Plimmouth and Dartmouth, an east and by North moone makes a ful sea, and without in the sea, an east S. east moone: alongst to Portland and within Portland, an east southeast moone, and in the Raste southeast, and foure Leagues a seaboord, it floweth a south southeast moone.

Item, at Needles in Wight, a southeast and by south

moone. And at S. Ellens a ſoutheaſt Moone, and at the eaſt end of Wight, and without in the Sea, a ſouth and by eaſt moone makes a full ſea.

Item, at Beachie a ſouth moone, and without a ſouth ſouthweſt moone makes a full ſea.

In the Camer a ſouth and by eaſt moone, and in the Downes a ſouth ſouthweſt moone. And without vpon the north Coaſt of England eaſt ſoutheaſt the floud comes from by north.

The Tides of the Coaſt of Flaunders.

AND vpon Flaunders Coaſt, a ſouth and north moone makes a ful ſea at the ſhore and in the Hauens, and without in the faire way a Southweſt and Northeaſt Moone.

Item in Zealand a ſouthweſt moone makes a full ſea.

Item, a ſouthweſt and by South moone makes a ful ſea before the Maſe, and within, a ſouth ſouthweſt Moone makes a ful ſea.

Item, in the Harlsdeepe, an eaſt or weſt moone makes a full ſea.

Item, at the Flee, a ſoutheaſt and northweſt Moone.

Item, before the weſter and eaſter Eames, a ſoutheaſt and northweſt moone makes a full Sea.

Item, before the Weeſer and before the Elue, and before Ankelwſen a ſouth or north moone makes a full Sea.

Item, at Hamborough, it Floweth at an eaſt or weſt moone.

Item, a Southweſt and a northeaſt moon makes a high water at Amſterdam.

The

The Tides ſeruing ſpecially for the Coaſt of England.

The Moone ſouth or north on the landes end full Sea.

The Moone ſouth and by eaſt, at the Ooze end, full ſea.

The moone ſouth ſouthweſt betweene Holy Iland and Tinmouth full ſea.

It floweth betweene Tinmouth & Flamborough head, a ſouthweſt and northeaſt moone.

It floweth betweene Flamborough-head and Bridlington in the Bay, a ſouthweſt and by weſt moone.

The moone in the weſt ſouthweſt betweene Bridlington and Laurenas full ſea.

It floweth betweene Laurenas and Cromer, all along the well an eaſt and weſt moone.

It floweth betweene Cromer and Yarmouth roade to Layſtow north roade, a ſoutheaſt moone.

It floweth betweene Laiſtow roade and Orfordnes, a ſoutheaſt and by ſouth moone.

It floweth betweene Orford & Orfewell waues a ſouth ſoutheaſt moone.

It floweth betweene the Naes and the ware head of Colne, a ſouth and by eaſt moone.

It floweth at the Spittes, and at the Scalp, & al alongſt the Swinne, a ſouth moone.

At the weſt ende of the Noze, a ſouth and by weſt moone full ſea.

It floweth at Gravel-end a ſouth ſouthweſt moone.

It floweth at London bridge, a ſouth weſt moone.

It floweth at the Northland, a ſouth ſoutheaſt moone, & ſo alongſt the Coaſt till you come to Beachy: and in the Offing from the north Foreland to the ſouth Foreland, it runneth halfe tide. And from the ſouth Foreland to the Naes to Fairely, it runneth halfe tide. And from fairely to Beche, it runneth quarter tide vnder other.

It floweth to ẏ weſt ward of Weche a henning, a ſouth-eaſt and by ſouth moone.

It floweth at Portelmouth, a ſouth and by eaſt moone.

It floweth at S. Elins a ſouth ſouthealt moone.

It floweth on the ſea ſide of the Iland, a ſoutheaſt and by ſouth moone, and ſo on the Land, at the Needles, and runneth quarter tide in the Offing.

It floweth at Poole in the hauen, a ſouth eaſt moone.

It floweth at Maymouth, an eaſt and weſt moone.

It floweth at Portland, a ſoutheaſt moone.

It floweth from the weſt part of Portland til you come vnto Plimmouth an eaſt and weſt moone.

It floweth on the ſhore from Plimmouth to the Lizard, a weſt and by ſouth moone, and in the Offing a ſoutheaſt moone.

It floweth at Mount Bay, an eaſt and weſt moone.

It floweth at Selly: a weſt and by ſouth moone.

It floweth at the Lands end of Cooſe: a weſt ſouth-weſt moone.

It floweth all alongſt the Coaſt by to Briſtow, and the coaſt of Ireland from Milford to Minine, a weſt and by ſouth moone.

Furthermore it floweth (for the moſt part) from the Poole head of Burdeaux, all alongſt the Coaſt of Biſkey, Galiza, Portingale, til you come to the ſtraights of Paliga, a ſouthweſt and northeaſt moone.

It floweth at Flushing a Southweſt and by ſouth moon

It floweth at Antwerpe an eaſt and weſt Moone.

It floweth all alongſt the Coaſt of Flaunders from the Wildings to Callis, a ſouth e by eaſt moone: and ſo runneth halfe tide vnder the other.

It wil flow a point of ẏ Compaſſe more in the Spring tides then in the neap.

Now here is one ſpecial thing to bee noted, and that is this: it floweth ſome point of the Compaſſe more in the Spring ſtreames, then it dooth in any of the quarters of the moone, (ſo that it bee a riuer where there is any draft hauing diſtance from the ſea) when there is neither

rage of windes, nor any cause either to hinder or further the said effect.

As for example, thus: it floweth at Graues end at the change of the moone or full, a south south west moone, but in one of the quarters of the Moone it scant floweth, a south and by west moone: and this is generall for euer.

Tides in a riuer that hath any distance vnto the Sea.

The markes to goe by the east, and of the Flee hard aboord the shore.

ITem your markes to goe into the Souther sea, by the East end of the Flee, being to the Westwards of it, you shall see two beacons, which stand on the east ende of the Flee, you must keepe them both togeather, vntil you come within 4. or 5. fatham of maine, and then you shal haue sight of the first Buy, which ye must goe withal: and being at the first Buye, you shall goe in alongst by the shore with the second, in three fatham, for it is not much deeper in that channell: you may leaue the Buy on which side ye will And as you drawe neare to the east end of the Flee, you shal come to 7. 8. or 9. fatham, but take heede you come not too neere the Flee, for it is there as you looffe in verie steepe: therefore you must giue the point a prettye b arth, going vp in 4. or 5. Fatham, vntill you come to the Buy, which you shall see to the south southwestwards of you, which you must leaue on your Larboord side, and so goe vp alongst by the Flee, vntill the Beacons begin to come together, where you may anker in 4. 5. or 6. fatham, as you thinke best.

The markes to goe in at the West gate by the Flee Iland or Skelling.

IF ye come out of the Sea, & meane to goe in at the wester Gate by the Skelling, you shall see a Beacon stand vpon the West end of the Skelling, hard by the Tower, you must runne in with the maine, keeping the Beacõs of

the

the Flee together, vntill you see the foresaid Beacon and Tower in one, and thus you shal finde the first buy, which you must goe in by, & so goe in from it vntil ye come to the other, your least water in this deepe will be 3. fatham, and thus going in from Buy to Buy, you shall come into the norther gate, and then you may go vp in that deep by those Buyes, your course is then south and by west, next hand.

The going in at the Norther gate.

IF you come out of the sea, & will go in at ỳ norther gate, looke for a great Beacon ỳ standeth vppon the west end of the Skelling, to the Eastwards of the tower by the sea side, and thus hauing the Beacon & the Tower together, you shal finde the first Buye of this Gate which lies in 3 fatham at the least. Leane it on your Starboord side, & goe next hand south in with the nert Buye, leaning it on your larboord side: to the nert goe in south and by west, & leane that also on your Larboord side: with the fourth Buye goe south southwest.

How to goe in with the wester Eames.

COming out of the sea, to go in for ỳ wester Eames, if you will look out for the first Buy, you shal see it why you haue brought the Bosse south southeast of you, the second buye lies from the Bosse south and by east, the third Buye is from that south: the fourth is south & by west: and these Buyes doe lie east and by south, and west and by north one off another, and by this you may knowe what Buy you goe in withall.

The courses from Hedland to Hedland about Island.

ITem from Ynge to Marchant Foreland, the course is west fifteene leagues, & between them is the Buye called Portland Buye, and a league to the westwardes of Ynge is an Iland called Ynge Iland, & lieth not a league from the maine.

Item, from Marchant Foreland to Westmonie, the course is west and by north 12. leagues, and to the north-

west

weſtwardes of Weſtmonie is a Bay, wherein is a Harborough called Dybag, and to the Eaſtwardes of Weſtmony lyes two Ilands, the one called Riſbell, and the other the Scatter, and they lie not two leagues from that hauen, and to the ſouthwards of Weſtmony there lieth alſo three or foure Ilands called the Gant Ilands, and the vttermoſte of them lieth 4. leagues of the maine.

Item, from Weſtmony to the Roock the courſe is weſt northweſt, 16. leagues, and three leagues to the eaſtwards of the Roock is a hauen called Genſwick, and at the point of the Roock lyeth two Ilands, called the Ganet Ilands, and they lie three leagues off the Roock, to the weſt ſouthweſtwards.

Item, from the Roock to Snoffall foote. the courſe is north northweſt twelue Leagues, and betweene them is Hamford Baye, in the which goeth in two ſoundes, the one is Hamford and the other is called Reblewicke, and in the ſouth part of the Bay, is Roſſimers Neſſe, & the north part is Snaffal foot, Roſſimers Neſſe, and the northwards of the Roock fiue leagues, and Botſum Hauen is to the northwards of the Roock three leagues.

Item, from Snoffall foot to faire Foreland, the courſe is north 11. leagues, and betweene them is a great Baye called Snoffall Bay, and 3. leagues to the northeaſtward of Snoffall foot in the Bay, is a hauen called Gamlike.

Item, from faire Foreland to Kettle Bay point, the courſe is northeaſt 16. leagues diſtant, and between them in the Baye are theſe ſoundes, the next to the Foreland is called Louſie Bay, and is there three leagues off, and to the northeaſt of it is Anderſſer, and the next Dereſſer, next Northerſſer, then Pigges Holl, and Soundiffer, which is a ſound & is two leagues ouer: in that ſound is a good harbrowe called Scotteliffer, and an Iland called Blunt Iland.

Item, from Kettlebaye to the Rag, the courſe is Northeaſt and by eaſt fiue leagues diſtant, and betweene them

are

are these Baies, First Kettle Baye, then Flouden Baye, nert Wolffe Bay, and then the Rag Bay.

Item, from the Ragge to sound riall point, the course is east northeast 20. leagues, and betwixt them are these Baies and sounds, there is a Bay fire leagues to the eastwards of the Rag called Ozgen Bay, and the easter point of that Bay is called the Ozgen point and that is the west point of a sound called Langerdall, and within that sound is a Harborough called Stingarffer, and the east point of Langerdall is called Shell Nesse, and it is betwixt both pointes eight leagues, and to the eastwards of Shel Nesse is a sound called Talkerffer, & in the mouth of that sound there are two Ilands, the one is called the Barnard & the other the Scate.

Item, from sound Riall point to Simbernesse, the course is east northeast ten leagues, and off the mouth of sound Riall lies an Iland called Gremse, nert sound Riall is flat and Flatstrand Bay, nert is Drenser, and it is betwixt it and Simbernesse 25. leagues.

Item from Simbernesse to Lagnesse, the course is east & by north 12. leagues, and betwixt them is a blacke bay.

Item, from Watlingser point to Sillie, the course is southwest 20. leagues distant, & betwixt them is Strond Bay and Watlingser.

Item, from Watlingser point to Sillie, the course is southwest 15. leagues, and these are betweene them. First Rose bay, nert Southerser, and then Red-cliffe, nert Sillie and in the mouth of Sillie is an Iland called Sillie.

Item from Sillie to the Yorne, the course is west southwest 30. leagues off, & betweene them is first Dofhouse, Rocke Baye, Pzie Bay, Gooderwick, nert Pappe Iland which lieth ½ a league from the shore, and off Dofhouse lies a Rocke fiue Leagues off the shore, called the Whales backe.

Item from the Yorne to Ynge, the course is West and by south fire leagues, and betweene them is Ynge Bay.

Breefe

Breefe Notes of Saint Georges Channell.

NOw firſt from S. Denis head in Wales, to the Calfe of Mans is 37. leagues, & at S. Denis head it floweth eaſt & Weſt halfe tide, & at the Ile of man it floweth ſoutheaſt, and the ſtoud runneth to the Northeaſt wardes.

Item, from the Calfe of Man to the moulde of Galloy, the courſe is north & by E. & they are 12. leagues diſtant.

Item from the Mould of Galloy, to the mould of Kinter, the courſe is N. northweſt, & they are diſtant 20. leagues.

Item the mould of Kinter and the ſound of Ellye, lye the one from the other north northweſt, and ſouth ſouth eaſt, and are diſtant 12. leagues.

Item, the Mould of Kinter and Carles Ile lyeth ſouth and north, diſtant fiue leagues, and it floweth there north-eaſt.

Item betwixt Caraway and Cozmeck Ile, it is fiue leagues.

Item, betweene Cozmecke and Dentram fiue leagues and it floweth there ſouthweſt and by weſt.

Item, betweene Dentram and the ſound of Ellie it is fiue leagues.

Item, betweene the ſmall ſound and Dowzet it is foure leagues, and it floweth there weſt ſouth weſt.

Item, betweene Dowzet and Laſt ernel is two leagues.

Item, betweene Laſt ernell and Kilbermozick, is foure leagues and it floweth there eaſt and weſt.

Item, from the mould of Kinter, all the ſound alongſt, vntill ye come to the Lough againſt Abermozick, the ſtoud runneth to the northwards, and from the great Lough to the northwards, the ebbe ſets out Weſt and the ſtoud eaſt, till ye come to the ſound of Poule.

Item, from Abermozicke to Rowze Remozy, the courſe

is

is east south east two leagues.

Item, from Kowbzie Wempzye, to Kittles Crosse, the course is nozth nozthest 14. leagues, and it floweth there east and by south.

Item, betweene the Kittles and Macknelles Castle, is two leagues, and it floweth a seaby3d Macknelles Castle a Nozthwest and by west Moone, and the floud runneth there to the Nozthwestwards, and the ebbe to the south-east.

Item, from Macknelles castle to Seale Iland, the course is west nozthwest, and they are distant two leagues, and there is a verie good roade in the east southeast side of the Seale Iland.

Item, from Seale Iland to Kowzie, is tenne leagues, and the course is Nozth and South, there the floud runneth to the southwards, till you come to the nozthwardes of Lobearim, and it floweth there nozthwest.

Item, from Kowbzie to Faire head, the course is nozth and by east thirtie leagues, there the floud runneth alongst the Coast to the Nozthwards, and the ebbe to the Southwards.

Item, Faire head and Holbozne head, oz Catnesse, lye East Noztheast fire leagues distant, and there it floweth a southeast and Nozthwest Moone, and the floud sets to the nothwards.

Heere followeth the course from Woods Hollom vp to the Narue.

Item, from Woods Hollom to the Ile of Nargen, the course is east noztheast fire Leagues, and there lyes a Rocke east noztheast from it two leagues off. At this Iland ye may see Reuel steeple east southeast from it, about ten oz twelue miles.

Item, from the Ile of Nargen, to the Ile Hogland on Finland

Finland side, the course is east northeast 26. leagues, and from Nargen ouer to Finland side, it is not past 8. or nine leagues, and all the said coast of Finland, is full of rockes and dangers.

Item, from the Ile of Yogland to the Ile Tuto, the course is southeast 4. leagues, and with that course ye shal goe to the westwards of Tuto.

Item from Tuto to the Narue, the course is southeast and by east 8. leagues, but in going from Tuto to the Narue wardes, ye must hale southest, or southeast and by south to goe cleere of the sholdes on Rusland side, the Latitude of the Narue is 60. degrees and 10. minutes.

Item, from the Narue roade the land lyeth west, vntil ye come as farre as Reuell, it is a faire Coast to saile by, and better sailing by it then by Finland side, or by Yogland except the winde be northerlye.

Item, there is an Iland west 12. leagues from ỳ Narue, called Earthollom. The said Ile is 2. miles from the main, there is good roade about it. Also there is an other Iland betweene Earthollom and the Narue roade, that is but 8. leagues west from the Narue, and there is a good road about it, there is the castle of Reyserwy by it, and on the Northside of it is a great ledge of Rockes called the Wrangles, they lie in the middest of the Sound, therfore beware of them.

A briefe way to shift the Sunne and Moone by memory.

First, ye haue to consider, that although the moone haue perfect but 29. daies 12. houres and 44. minutes from Coniunction to Coniunction, yet in shifting the Sunne & Moone for knowing the tides, it shall not bee hurtfull to giue her 30. daies iust, onely to auoide fractions, or broken nũbers in the vse therof, for so small is ỳ error that groweth thereby, that it is not to be accompted in any one tide, to bee any annoyance to the Mariner.

Further

Further, you have to note that ỹ 32. pointes of the Compasse containe in this vse 24. houres of times, so that euerie point is iust ¾ of an houre or 45. mi. and euery 24. howers the Sun and Moone depart the one from the other 48. minutes which is iust a point and 3. minutes more. And being 48. houres or two daies old, they are two points and 6. minu apart, and after this manner for euerie day of her age ye must ad to their apertiment 1. point and 3. mi. vntill she come to the full or 15. daies olde. And also yee shall note, that from the change to the full she riseth by day and hath her hornes to the eastwards: and from the full to the change hath her hornes to the westwards, so that alwaies her hornes are turned from the Sunne, and also at the ful shee is directly against the Sunne as appeareth by the figure following on the other side.

And likewise ye shall note, ỹ continually at the instant of the ful, the moone riseth at the present time, ỹ the Sun goeth down in ỹ *oppolit or contrary point, & therfore those that hold opinion ỹ the moon alwaies riseth at the quart. at 12. of the clocke at noone, & at the full at 6. of the clocke at night, they are much deceaued. For if the sunne set at 4. of the clock in winter, he goeth neere the southwest and by west, the moone being then at the ful in Canc. must nedes rise at northeast & by east, at the same present houre that the sun setteth. And as many are deceaued in this point, so are there also many mistaken, and oftentimes greatlye anoyed in an other point, & that are those ỹ vse in going with any bard harborough, hold, or land, to set the moone by the compasse, to know the time of the full sea in any place, and this is surely a dangerous practise. For if the moone be in northy signes as in Gemini or Cancer, & that he seeke the full sea on the East, or East Southeast, then by setting the Moone by the compasse, to know the ful sea he may misse almost 2. houres of his tide, and thereby come to a great annoyance, and knoweth not how nor by what meanes it chanceth. Therefore let euerie man that shal stand in nede of this

*This is to be vnderstood when the moone hath no Latitude, but is iust vnder the Ecliptick line, for otherwise whē the M. hath her greatest N. or So. Latit. she wil differ for the moste parte more then half a point and sometimes an whole point & more f. ō the Suns oposit point in such places as bee farre towards the North or South.

of this rule, practise & vse therein my booke, which is more commendable then Tables, but if their capacities serue thē not to do it by head, the I wish them to vse rather such tables as are extant for that purpose, vntill they are otherwise able to performe by memory. For as the Compasse lying in all places horizontally is important to shew the true apertinent of the Sunne & moone in the Tables, so likewise by it's imperfection, the Compasse is at no time a true object to shew the hours of the day, except for y instant time of the midday, as when the Sunne is vpon the poales of the Meridian, where the Equinoctiall cuts the horizon, or els in the Equinoctiall points, except the East of the compasse be lifted vp as the Equinoctiall is mounted in the East where the obseruation is made. And this is specially found in summer time, when the Sunne is in north Signes, as in Cancer or Gemini, at which time it is about [illegible] before the sunne come to the east point of the compasse, yet it is commonlye counted with many that the East Sunne by the Compasse is alwaies 9. of the clocke in the morning, & west Sunne to be 6. of the clocke at night, which is generally for all the other points of the compasse. But all this error commeth by the [illegible] of the Compasse as I before haue said, which is the imperfection of the compasse in regard of the vse in declining the tides, by setting the [illegible] in the eye, therefore I wish no mā to vse it to y perill but to reckon them apertinent by memory or by tables as I haue before said. And further here is to be noted, the common compasse lying flate, a point to the eastward of the true position of any place, as some Compasses are alwaies a point from them. I say by that Compasse where the [illegible] is varied from the true meridian of the place, so much that it be vncertaine to finde out the houre of mid-day at sea, yet many makes not obseruation of the Sunnes meridian Altitude, vntil he be at it, by this varied compasse, & then is the Sun past the instant of the meridia, and his Altitude some what decreased.

the order of your compasse, that is to know your points both with the Sunne, and against the Sunne, beginning at the north poynt, as hereafter followeth.

North, north & by east, north northeast, northeast and by north, northeast, northeast and by east, east north east, east and by north, east east and by south, east southeast: southeast & by east, southeast, southeast and by south, south southeast, south and by east, south, south & by west, south southwest, southwest and by south, southwest, southwest and by west, west southwest, west and by south, west, west and by north, northwest, northwest & by west, northwest, northwest & by north, north northwest, north and by west, north.

Thus it is said with the Sunne, and so beare full west, against the Sun: north, north & by west, north northwest, and so forth contrarie wise.

And thus much you learne to know your Compasse, both with the Sunne and against the Sunne.

Now when you have learned your compasse with the Sun, and against the Sunne perfectly, you shal learne to bring 32 to 24, as hereafter followeth.

Heere is mentioned before, your Compasse wherein are 32. pointes, also you have to everie point 45. minutes and so your 32: pointes are 24. houres, and to your 24 houres there are 1440. minu. also your 32 points are not an houres speece, for they lacke 15. minutes a peece of an houre. Also you shall take out of your 32 points 8 points, so there resteth behinde 24. pointes, which 24. pointes must be brought into 24 houres, you have mentioned heere before your Compasse, wherin are 32 pointes. Also you have heer mentioned your 24 points, & also your 8 points. Now for to bring your 24 pointes to 24. houres, you have to everie one of your 24 pointes, 45. minu. a peece, and so they lacke

15. minutes a peece of an houre. Now for to make the 24. pointes 24. houres, you haue 8. points which you did take out of your 32. pointes: and those 8 pointes must be parted into 24. parts to make the 24. points 24. hou. Also you haue to euerie one of your 24. points 45. min. the which 45. min. is three quarters of an houre. Also you haue to euerie one of your 8. pointes 45. min. a peece, so your eight pointes there is 6. hou. & to your 6. hou. there is 18. score min. these 18. score min. must be parted into 24. parts, and to euerie part 15. min. And when you haue 18. score min. are parted, giue to euerie one of your 24. pointes 7. minut. and that shall make euerie point diuident, 7. minut. 30. sec. that makes three score minutes, and those 60. minutes are an houre, and so your 24. pointes are equalled. So that 8. points, make the 24. pointes 24. houres, and 32. pointes 24. houres. And so giuing to euerie 4. pointes 3. houres through your whole compasse. In your first 4. houres, and you haue to the 24. houres 144. minutes, and this is called the bringing of your 32. pointes to 24. houres, and your 32. to twentie foure.

This rule of bringing 32. to 24. or any other number of pointes, giuen to the number of houres contained in them, may suffice to be performed thus:

As 3. is to 4. so is the number of the points giuen to the number of houres contained in them. Therefore multiply the pointes giuen by 3. and deuide the product by 4. for so the quotient shall be, the houres sought for.

As for Example.

If you would know how many houres 13. points of the Compasse will make, multiply 13. by 3. the product shall bee 39. which being deuided by 4. the quotient giueth you 9. houres and three quarters.

Particular

Particular notes from the change to the full, to knowe how many pointes and minutes the Sunne and Moone are apart, during which time, the Moone seemeth by the course of the diurnall *motion to be behinde the Sunne: nevertheless by her proper motion in the Zodiacke, being swifter then the Sunne, she goeth continually before him, vntill the instant of the next conjunction or change.*

FIrst at 1. day old, the Sunne and Moone are one point and 3. minutes asunder, and the Moone to be behinde the sunne to the eastwarden, and so vnto the full.

At 2. daies old, they are 2. pointes and 6. minutes asunder.
At 3. daies old, they are 3. pointes and 9. minutes asunder.
At 4. daies old, they are 4. pointes and 12. minut. asunder
At 5. daies old, they are 5. points and 15. minutes asunder.
At 6. daies old, they are 6. points and 18. minutes asunder.
At 7. daies old, they are 7. points and 21. minutes asunder.
At 8. daies old, they are 8. points and 24. minutes asunder.
At 9. daies old, they are 9. points and 27. minutes asunder.
At 10. daies old, they are 10. pointes and 30. min asunder.
At 11 daies old, they are 11. pointes and 33. min. asunder.
At 12. daies old, they are 12. pointes and 36. min. asunder.
At 13. daies old, they are 13. pointes and 39. min. asunder.
At 14. daies old, they are 14. pointes and 42. min asunder.
At 15. daies old, they are 15. pointes and 45. asunder, the one directly against the other, and then is the moone at the full, vntil which time ye must reckon the moone alwaies to be so many pointes behinde the Sunne, as is aboue expressed.

The apertiment of the Sun & Moone, from the ful vntill the change: in al which time the Moone is to bee reckoned before the Sunne.

Item, at 16 daies old, the Sun & Moone are 14 points and 42 minutes a sunder, the Moone seming to be before the Sunne to the westwards.

At 17 daies old, they are 13 pointes, and 39 minutes a sunder,

At 18 daies old, they are 12 points and 36 minut a sunder

At 19 daies old, they are 11 pointes and 33 minu a sunder

At 20 daies old, they are 10 points and 30 minu a sunder

At 21 daies old, they are 9 points and 27 minuts a sunder.

At 22 daies old, they are 8 points and 24 minuts a sunder.

At 23 daies old, they are 7 points and 21 minuts a sunder.

At 24 daies old, they are 6 points and 18 minuts a sunder.

At 25 daies old, they are 5 points and 15 minuts a sunder.

At 26 daies old, they are 4 points and 12 min. a sunder.

At 27 daies old, they are 3 pointes and 9 minut a sunder.

At 28 daies old, they are 2 pointes and 6 minu a sunder.

At 29 daies old, they are 1 points and 3 minut a sunder.

At 30 daies is the Coniunction of the Sunne & Moone.

Now when you knowe by these Rules before thewed, how many pointes the Sunne and Moone are apart, and whether they be before or behinde the Sunne, then is it easily knowne by the course of the Sunne, the houre & minut when the Moone shall come vpon anye point of the compasse, where ye desire to know the houre of the full according to her age, as herafter followeth to make it plain by example.

When

An Example.

When the Moone is 10. daies old, I desire to know at what houre she commeth to the south southeast to make full Sea at Callis, or in any other place where it floweth on that point? I say then 10 daies of her age sheweth her to bee 10. pointes, and three times ten minutes from the sunne and behinde him. Now for seeking of the houre of the full sea, the Moone being at south southeast, you must reckon the Sunne to be 10. pointes and 30 min. before her to the westwards, which falleth on the west point, and 30. minutes to the Northwards. And therefore the Sunne being on that point, and 30. minutes to the northwards of the west, I say the full Sea shall be at five of the clock and 30 minutes at Callis, and in all other places where a south southeast Moone makes a full sea.

Another Example.

When the Moone is 18. daies old, being before the Sunne, I desire to know the houre of the full sea, where an east moone makes a high water. I consider that the ☽ being but 18. daies old, there is yet 12. daies of her age to come, which sheweth the Moone to be 12. pointes, & 30. min. from the Sunne, and before him, the Moone then being at the east, & the Sunne must be 12 points & 30. min. behinde her, which is at northwest & 30. min. to the westwards. So the full sea where it floweth east or west, & the Moone 18. daies old, shall be at 8 of the cloche 24. minutes. And that by this computation is easily found in all places, and upon every point of the Compasse, the time of the full sea or high water, the age of the moone being knowne as is before declared.

How to knowe the houre of the night by the Gwards, by knowing on what point of the Compasse they shalbe at midnight, euery fifteenth day thorow out the whole yeere.

First you must vnderstand, for the certaine knowing of the points of the compas, that North is alwayes to be vnderstood, directly ouer or aboue the North starre, and South vnder eath, as you behold the starre to the right hand warde, and West to the left hand, y gwards seme to go against about the sun lykewise comming from East to North, and from North to West, and from thence to the South, and so round euerie three monethes of the yeare, occupying one quarter of the Compasse as followeth.

January, February, and March, occupie the North-east quarter.

April, May, June, the North west quarter.

July, August, and September, the South west quarter.

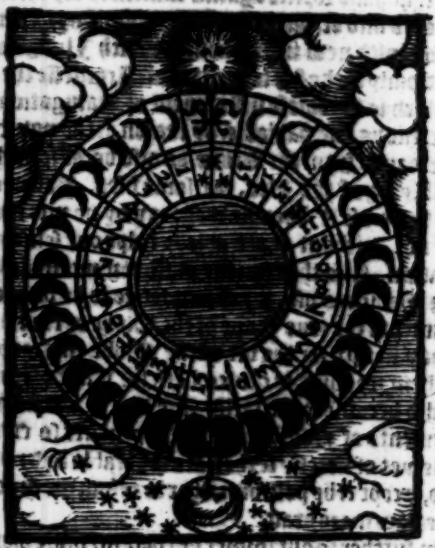
October, November, and December, the South east quarter.

And although I haue onely shewed the hour of the night by Gwards or little Bear, yet the like also is to be knowen by any other notable fixed starre, that is neere the Pole because the fixed starres contained within the constellations keep alwayes one equidistant motion from the Pole, without any great varietie, mouing alwayes about the Pole, in 24. hours euerie one in his proper Circle, according to the diurnall motion. So that by the point or place considered that they occupie euerie month at midnight, may also easily be knowne the other houres of the night, in reckoning

euery

euerie point to be of ¼ an houre of time. And although in this rule for the houre of the night by the Cward, there be 4. imperfections or errors, growing by our view, being vpō the face or superficies of the earth or water, yet so small is the error and so great the benefit of the houre of the night, that I haue rather thought it necessary to set down it with that error, then to omit it and lacke the benefit & vse thereof. And heere I haue occasion given me somewhat to speak of them that haue written against mariners for their grosse iudgements and erroneous rules, promising generall reformation with new instruments, which I long haue desired, and daily looke for to see extant, I confesse the Compasse (which is the chiefe instrument of Nauigation) to be most erronious and variable, by reason of the naturall propertie reteined from the Stone, as also because of the horizontall lying of the Flee, for some dies. Yet necessitie causeth vs to vse it, because wee may by no meanes finde better, nor without it are able to helpe our selues in any Nauigation. Also the Plaine plats commonly made for the sea & Marriners vse, I acknowledge to be very erronious, & farr from the true shape of the Globe or round bodie: yet I may not prefer the vse of the Globe in Nauigation before them, for sundrie causes, both for want of true courses as also because of Variation. And yet for all such rules, & instruments of Nauigation, as haue neuer so erronious and false, yet of necessitie they are tollerable and not to be omitted, except it be possible rather to reforme the olde, or to make new more exact.

Now further to our former purpose for more plaine vnderstanding thereof, I will set downe where and on what point of the compasse the Cwards are found at midnight, euerie 15. daies through the whole yeare, as hereafter followeth, and for the better vnderstanding, I haue heere set the Flee of the Compasse, with all the pointes present.



Where the Gwardes are at midnight, euerie month in the yeere.

I. The 15. day of Ja. the Gwards are at east at midnight.
The end of Ja. east and by north northerly at midnight

F. The 15. of Februarie at northeast and by east at mid.
The end of Februarie at northeast at midnight.

M. The 15. of Mar. at northeast & by N. northerly at mid.
The end of Marc. north & by east easterly at midnight.

A. The 15. of Aprill north at midnight. (at midnight
The end of Aprill the Gwards north & by west westerly

M. The 15. of May at northwest & by north at midnight
The end of May at northwest & by north at midnight.

I. The 15. of June northwest & by west Gwards at mid.
The end of Ju. at w. & by N. northerly Guards at mid

I. The 15. day of July at west Gwards at midnight.
The end of July at west & by south southerlie at mid,

A. The 14. of August at southw. & by west westerly, at mid
The end of August the Gwards southwest at mid.

S. The 15. of Sept. at southw. & by So. southerly at mid,
The end of September at south & by west westerly mid.

O. The 15. of October a south Guard is then midnight.
The end of October at south & by east easterly midn.

N. The 15. of Novemb. at southeast & by S. southerly mid
The end of Nouember at southeast, then it is midnigh

D. The 15. of Decemb. at southeast & by east easterly mid,
The end of December at east & by south southerly mid

Now

Now when you knowe on what point of the Compasse the Gwards are alwaies at midnight, then may yee by it also knowe the houres before or after midnight, alway reconning for euerie point that they shall lacke of the midnight point ¼ of an houre, & for euerie point that you shall finde them to be past the midnight point, likewise ¼ of an houre, as for example.

Example.

The 15. of Januarie the Gwardes are at east at midnight, if then you finde them at south east, which is foure pointes short of the east, that sheweth it to bee foure times ¼ of an houre before midnight which is nine of the clocke in the euening.

If you finde them past the east point, looke how many points they are past, so many times ¼ of an houre is it past midnight, and this is a generall rule for euerie month in the yeare. If the verie same day of the month be not heere expressed, which you shall then occupie, then take the middest, or the end of the same month that is next vnto the same day, and so the error cannot be great.

The houre of the night is also knowne by the Gwards or any other Star neere vnto the north Pole, by diuers sorts of instruments made to that vse, some deuided as the compasse into 32. points, thereby reckoning ¼ of an ho. for euery point: others deuided into 24. houres, as this Instrument following, which is to be made of a Hoope of mettall deuided into 24. houres, euerie houre hauing a little pinne, that it may be felt in the night when it cannot be seene, to number the houres. This Hoope being deuided into 4. equal parts, ye shall make fast a thred to euery quarter thereof, and the other 4. endes of them shal be fastned to a ring in the middest of the instrument, through the which yee shall see the north Star. And thus holding it verie vpright, & of a reasonable

reasonable distance fro your eye, ye shal haue the Wards directly with the pinnes in the Hope, at such howres as is numbred vnder the pin. But it is necessarie that ye knowe by memorie (as I haue before shewed) what point those starres shall be on at midnight, and thus it serueth for any starre neere the Pole.

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